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# RiscStation 1999 2000

RISC OS compatible products for the new Millennium

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The R7500 Scorcher from RiscStation arrives with a quality CD ROM Reader/ReWriter and media. Using the acclaimed CDBurn suite the Scorcher provides a brilliant CD mastering platform for home users.

56 Mhz ARM7500FPE (with integrated floating point co-processor)

RISC OS 4.03

64Mb 60ns EDO System Memory



4x4x24 minimum speed CD ReWriter

10Gb EIDE Hard Drive

4/6Mb ROM/Flash Memory containing RISCOS 4 and Utilities

Micro ATX Desktop or Mini/Midi Tower Configuration

Minimum 60 Watts External Stereo Speakers

2 x Serial Port \*Rated at 460k baud

2 x PC Style Game Port supporting Midi In/Out/Through

2 x High Speed EIDE Ports \*Supporting up to 4 devices

1 x 10baseT Network Port with Wake On Lan Support

1 x EPP/ECP Fast Parallel Port

1 x IRDA Infrared Interface Support

1 x High Density Floppy Drive Port

1 x 15Pin VGA Connector

Full 16Bit OPL3 Stereo Sound Sampler & Mixer with FM Synthesizer support, 2 CD Mixer Ports 3 x 3.5mm Jack Sockets for Line in/Mic In/Headphone & Speaker Out

PS2 Style Keyboard Input

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CD Burn, Easi Writer Pro, DrawWORKS Millennium, Fireworkz Pro, Ankh, Botkiller II and much more free software.

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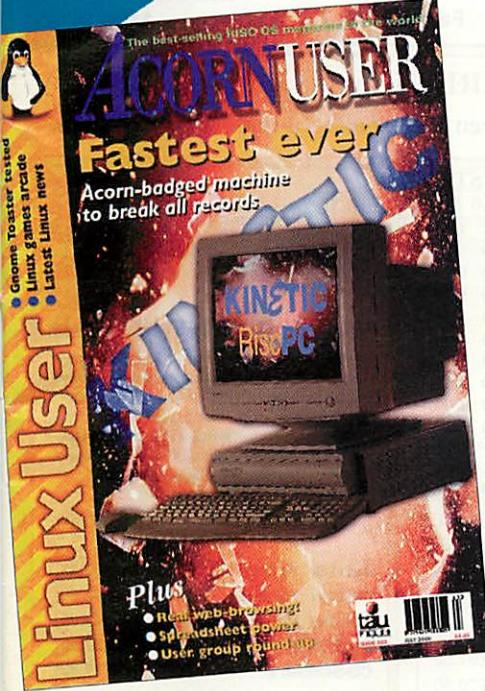
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168 Elliott Street  
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# ACORNUSER



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26 Stockport Village, Hooper Street,  
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Editor Steve Turnbull  
Production Consultant Alan Jones

Contributors  
Mike Cook, David Dade, Richard Goodwin, Andrew Green, Paul Johnson, Teri Paul, John Pettigrew, Paul Richardson, Jill Regan, Pam Turnbull, Paul Vigay, Richard Wareham

Account Manager Paul Johnson  
Finance Manager Gary Duxbury  
Subscription Manager Richard Siggee  
Distribution COMAG (01895) 444055  
Deputy Managing Director Steve Turnbull  
Managing Director Sharon Henderson

Subscriptions  
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Feeling smug?  
You know what I mean, half the world collapses because the computers get sudden feelings of love? Well at least that's what that virus made the recipient think.

Did we all chuckle? I know I did. After all what kind of company sets up a program with defaults that automatically makes the entire system vulnerable to viruses? Microsoft apparently.

Oh yes we can all feel smug.  
Or that's what I thought but there really are two aspects to this, the first is similar to a point that I made last issue. The size of the market dictates that virus writers (and they do exist) are few and far between.

However given that the market is going to increase in size and that, if it did there might be thousands of disgruntled PC programmers out there. What are the chances of more viruses appearing?

The second is more important and I have tried half a dozen ways of phrasing it so that it doesn't give away the answer but I just can't do it, so I'll have to leave at this: There is a way for RISC OS viruses to be transmitted by e-mail.

The good thing is that, if it's an existing virus, your virus killer (you do have one, don't you?) will take care of it without any additional work. But if it's a new one you better watch out.

Personally I have adopted a slightly humbler viewpoint. We are not immune.

But on a lighter note, the Wakefield Show was great. We're doing well.

Steve Turnbull  
Editor

August CD issue on  
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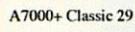
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<b>Cooling Fans</b>	Ex VAT	Inc VAT
Fan for A310/400	£15.00	£17.62
Fan for RPC/A7000	£15.00	£17.62
Fan for PC-Co processor	£4.00	£4.70
5.25" Hard Drive fan kit	£15.00	£17.62

### "Accent" Midi upgrades



Midi Break-out cable with driver sw	£15 + VAT	
Yamaha DB51 XG Wavetable Card, Midi cable & drivers	£99 + VAT	
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Podule "MidiMax Card	£79.00	£92.83
MiniPodule Midi card (A3x00)	£69.00	£81.08
Refurbished Midi card A3x00	£29.79	£35.00

### MONITORS

	Ex VAT	Inc VAT
15" LCD (3yr on-site)	£629.00	£739.08
18" LCD (3yr on-site)	£1835.00	£2156.12
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15" SVGA 0.28 (3yr on-site)	£95.00	£111.62
15" SVGA 0.28 Multi-Media	£119.00	£139.83
17" SVGA 0.28 (3yr on-site)	£139.00	£163.33
19" SVGA 0.26 (3yr on-site)	£249.00	£292.57
21" SVGA 0.25 (3yr on-site)	£540.00	£634.50
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17" Iiyama Vision Master PST	£235.00	£276.12
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AKF12 PAL 14" return 90 days	£49.00	£57.58
AKF52/53 M/sync return 90 days	£99.00	£116.32
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All monitors inc 3 yrs wty unless specified

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Canon BJC 2000 Scan #	A4	£139.00
Canon BJC 4650 colour #	A3	£222.00
Canon BJC 4650 Scan #	A3	£275.00
Canon BJC 7000 colour #	A4	£165.00
Epson Stylus 460 colour	A4	£69.00
Epson Stylus 660 colour	A4	£85.00
Epson Stylus 860 colour	A4	£165.00
Epson Stylus 1520 colour	A3	£340.00
Epson Stylus Photo 750 #	A4	£159.00
Epson Stylus Photo EX #	A3	£225.00
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HP 895CXI colour	A4	£169.00
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HP LASERJET 2100 PCL		£454.00
HP LASERJET 2100 PS		£514.00
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\*\*\*FREE Acorn driver by request\*\*\*

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A400/A5000 10base2 & T Access+	£99.00	£116.33
A3020 10base2 Access+/ext. MAU	£94.00	£110.45
A3020 10baseT Access+/ext. MAU	£94.00	£110.45
Risc PC/A7000 10base2 & T Acc+	£99.00	£116.33
Risc PC/A7000 10base2 Access+	£79.00	£92.83
Ant Access + ROM upgrade	£10.00	£11.75

#### Cables

2M	£3.00	£3.53
3M	£5.00	£5.88
5M	£6.00	£7.05
10M	£10.00	£11.75
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Lanman98 single user	£35.00	(£41.13)
Win95FS single user	£35.00	(£41.13)
Lanman or Win95FS	£110.00	£129.25
10 user site licence	£156.00	£183.00
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World Class Leaderboard (GOLF)	£10.00
Zool (HD)	£10.00

# Finding the very best view

1600x1200 with 16 million colours in a standard Risc PC! No, this isn't the April Fool issue. It's the arrival of *ViewFinder*, and the future of Risc PC graphics.

By the time you read this, one of the most eagerly desired, and yet unexpected, RISC OS products should hopefully be available for shipping. The *ViewFinder* video enhancement expansion card is the baby of graphics guru John Kortink. John will be familiar to RISC OS users as the author of *Translatr*; a shareware alternative to *ChangeFSI*, and *Creator*; a sprite to foreign graphics converter.

*ViewFinder* is essentially an interface to allow PC standard AGP graphics cards to be plugged into the Risc PC. This is understandably very exciting news for all Risc PC owners who have been longing to have the graphics to rival modern PCs.

Not only are a whole range of screen modes previously unavailable on the RISC OS platform suddenly available, but the board promises hardware acceleration too. Is this a dream come true?

True colour (32-bit) resolutions  
1600 x 1200, 82 Hz  
1280 x 1024, 107 Hz  
1024 x 768, 135 Hz  
800 x 600, 135 Hz

High colour (16-bit) and 256 colour (8-bit) resolutions

1920 x 1440, 65 Hz  
1800 x 1440, 68 Hz  
1600 x 1200, 88 Hz  
1280 x 1024, 107 Hz  
1024 x 768, 135 Hz  
800 x 600, 135 Hz

Though it is essential that your monitor is capable of handling these modes, it is potentially possible to damage a monitor by driving it too hard.

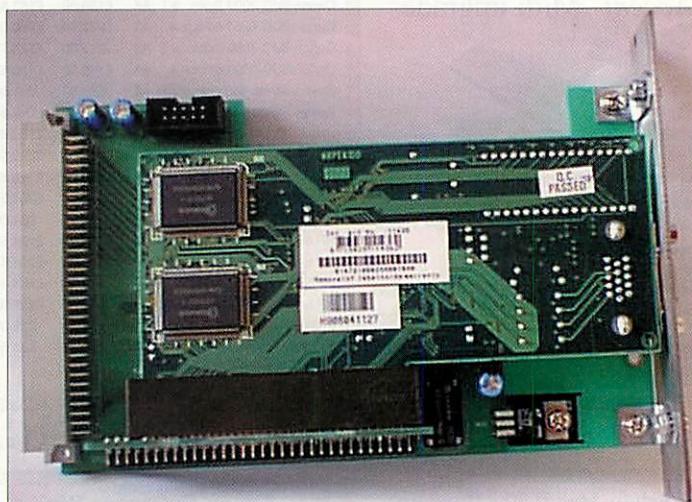
The card is designed to be upgradeable as it comes complete with FlashROM on board which contains all the driver software.

According to John's Web page the card should allow for future add-ons and possibly even better AGP graphics cards. The card is supplied with an ATI PC card, but there is no reason that other cards

can't be catered for, via suitable drivers. The only limiting factor seems to be the physical side of the Risc PC backplane.

*ViewFinder* should work transparently to RISC OS which means that software such as *Photodesk* and *Cerilica Vantage* should be able to gain an immediate benefit from the upgrade.

Although at the time of writing this, the price is yet to be finalised, it should be around the £200.00 mark, which makes it a worthwhile upgrade to Risc PC owners wanting to give their machine a new lease of life and again rival their friends PCs.



## Don't panic

One time editor of *Acorn User* magazine, world rambler and currently reporter for the famed *Hitchhiker's Guide to the Galaxy*, Mark Moxon – currently possessing the usual two arms, two legs and a head, all in the usual places – has revealed that RISC OS computers now have an entry in that excellent book.

Technology as yet being unable to maintain the full

HHGTTG in a single electronic volume is maintained on the Web at: [www.h2g2.com](http://www.h2g2.com). The entry itself is under [www.h2g2.com/A302004](http://www.h2g2.com/A302004)

We'll let you find out for yourself exactly what it says, but you can be sure it's better than the original book's entry for Earth: *Mostly harmless*.

Share and enjoy.

# Hardware cooperation

ARM-based computer manufacturers Microdigital and RiscStation have come to a Memorandum of Understanding regarding new technology. The two companies intend to produce any new hardware designs on a common technology so that full compatibility is maintained across all brand models.

Any other hardware manufacturers are invited to join this approach, which will mean that future RISC OS products will benefit from hardware compatibility. This will benefit not only end users who can rest assured that there shouldn't be any compatibility issues affecting their choice of new machine, and also any hardware designers who wish to share technical knowledge and design notes.

The first product based on this understanding will be an ARM7500 based laptop, which will come as good news to many people waiting for a replacement for the aging A4.

At the Wakefield Show Microdigital were demonstrating

their prototype portable, the box was less than attractive but what was inside is what really counted – RISC OS.

Meanwhile RiscStation were touting their proposed case for their portable, a very sophisticated-looking brushed aluminium machine. The machine was taken apart by Gareth Simpson of Simtec, who showed the detachable harddisc which can be removed for security – and to get at the network interface.

"We haven't got the board to fit yet but it's only a matter of design. We won't be needing the cooling fan

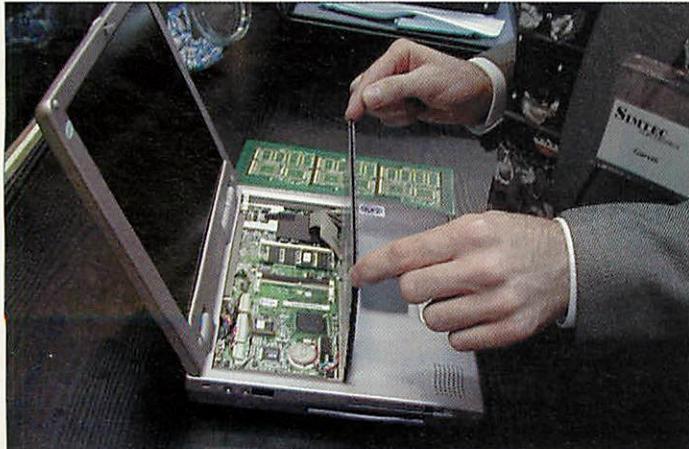
as the board will only take 5 watts – without the harddisc running."

Naturally a RISC OS portable has far less disc activity and will give the battery a considerably longer operation time than the power-guzzling, heat-generating Intel-based design.

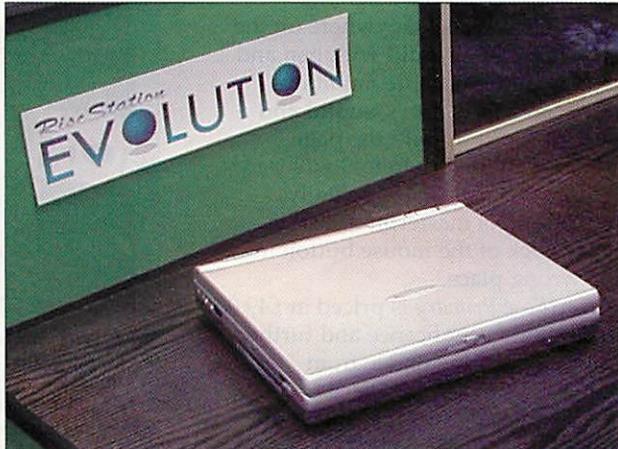
Sharon Henderson, MD of Tau Press, commented: "It's an excellent looker – you could market something like that to any businessman, regardless of what was inside. It's looks and marketing that count, you only have to see the success of the iMac to see the truth of that."



All the usual inputs and outputs – which is what we want



Gareth Simpson of Simtec gets at the memory under the keyboard



Elegant and stylish, the brushed aluminium case just looks excellent

# Wakefield 2000

## The Acorn RISC OS Show

### New Millennium DrawWorks

iSV products have enhanced their *Drawworks* application again. *Drawworks New Millennium* builds upon the huge success of previous program and adds even more functionality, including on screen anti-aliasing, background font blending, user-selectable Grade and Interpolate levels, writable options for grid spacing and divisions, and colour-coded on-screen manuals.

There are loads of new tools and

improvements to existing features. Many improvements have been made to the EPS (Postscript) handling, including the ability to produce Postscript Type 1 fonts with full hinting. This was previously available as *FontFiend* – now supplied with Drawworks NM as standard.

New users can purchase the full package for £40.00 whereas existing users can upgrade for £20.00.

#### Dave Walker

A regular at the Acorn shows is Dave Walker, ex-Acorn customer support and computer techie of renown. He stopped over to chat and explained his current work at Sun Microsystems is high-end networking related to ISP-based applications and Internet-phones.

"But," he explained. "What they don't know is that I do all my design work in Draw, and the export it as Postscript for the customers."

You can't hold RISC OS-user down.

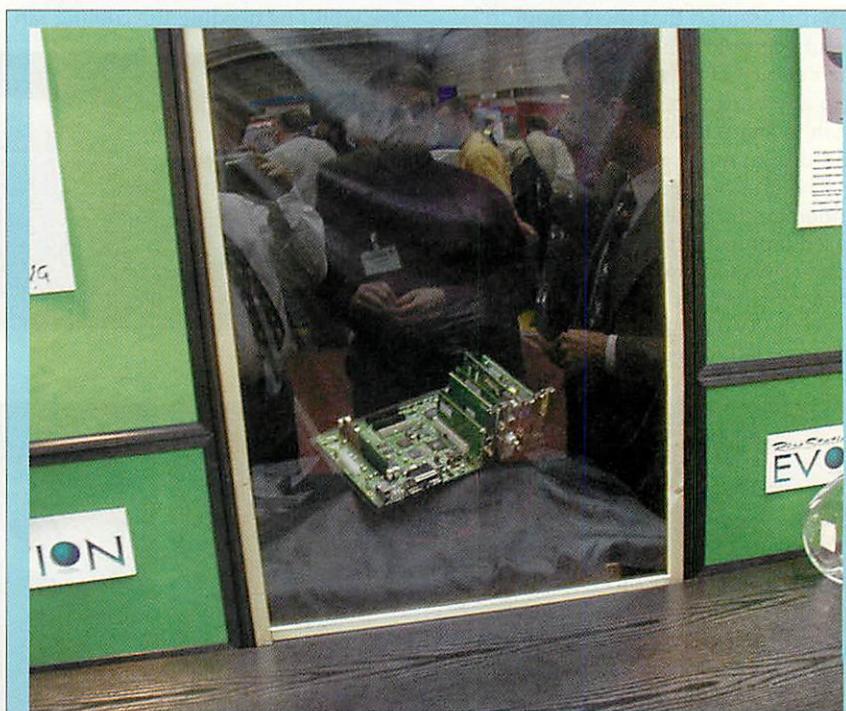
### Going easy

New from SoftEase is a special primary version of their award winning *TextEase Multimedia* document processor. Specifically designed to meet the literacy needs of primary school children aged 6-11 years, *TextEase Primary* adds a new 'speak-as-you-type' facility which will help word recognition, spelling and sentence construction.

Pupils can click anywhere on the screen, as they would with pen and paper. However more ambitious ones can add pictures, sound and even video clips onto the page.

An unlimited redo tool will remove the fear of accidentally messing up a masterpiece with a hasty click of the mouse button in the wrong place.

*TextEase Primary* is priced at £49.00 for a single user licence and further information is available from SoftEase Ltd., Market Place, Ashbourne, Derbyshire. Tel. 01335 343421, Fax. 01335 343422. Web: [www.textease.com](http://www.textease.com)



Riscstation were continuing to promote their 'Evolution' computer although a few more details are now available: It is a StrongARM-based machine and does have complete PCI compatibility. Although not yet running RISC OS the machine is running other operating systems such as Linux, BeOS and (whisper it) Windows CE. Once again this is a Simtec-originated design being used by them for other customers than Riscstation but we're not complaining. In the reflection, from right to left are Gareth Simpson of Simtec, Roy Heslop of Riscstation and spot prizes will be given for the first right identification of the photographer.



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# The warm silence breaks

Warm Silence in a completely unexpected move has announced the takeover and future development of the *Netplex* Web server software for RISC OS. *Netplex* can be used to provide Web support either on a local Intranet or even across the Internet.

Crucially it has the capability via various scripting languages to build Web pages "on the fly" when requested which gives it the capability of providing industry-standard "auto-generating" sites.

The various scripts can be built either from BBC Basic, Perl or PHP, plus it has "server-side includes"

which means that Web pages can, for example, include the time that they are created.

Complementing their move into network support Warm Silence Software have also announced their new SVG Converter and Sound plug-ins.

While RISC OS users have had the ability to create common, compact, scalable vector graphics files (that's *Drawfiles*) for the past 12 years, it's a concept that's only just hit the rest of the world.

The format that's been adopted for the WWW is SVG (scalable vector graphics) and these can be

embedded into Web pages just like GIFs, JPEGs or PNGs. The new SVG Converter from WSS allows you to change SVG files into Drawfiles for use with RISC OS packages, opening up the potential for a whole new set of clip-art.

But, not only that, the SVG Converter will act as a standard RISC OS browser plug-in so that, when an SVG file is encountered on the Web this program will automatically render it on screen.

*Netplex* costs just £35+VAT, SVG Converter is £10+VAT. WSS can be contacted on: 01608 737172; e-mail: info@wss.co.uk; Web: [www.wss.co.uk](http://www.wss.co.uk)

## RISC OS Board Changes

On Friday 5th May, RISC OS Ltd had its first Annual General Meeting. Although the annual report was not available at the time of writing, there were a few changes on the board of directors.

Laurie van Someren, Chris Evans, Bernard Bollons, Justin Fletcher and Matthew Bullock retired after a very busy first year. They will concentrate on other issues.

Taking new places on the board are Aaron Timbrell of iSV Products and Nick Way.

We would like to wish them both good luck in their new roles.



## Keep your name

Spelling Computer Services (07785 935497) has announced a new service for RISC OS users, for just £2 per name (£1 for user group, ARM Club or RISC OS Foundation members) you can get an [aaug.net](mailto:aaug.net) e-mail address and keep it forever.

The system automatically forwards any mail to your current ISP, which means that you can use the same name regardless of which ISP you use – even if you change ISP.

All the names are of the form [yourname@aaug.net](mailto:yourname@aaug.net)

## Read the book

MLS is one of those RISC OS companies that you don't hear of very much because, rather than supplying general purpose software, they provide just one to a specific market.

In this case it's a library system for Junior schools, they've been around for many years but the latest version of the system has recently been released.

Designed for use by children the Acorn Junior Librarian is designed to be used by children and is essentially bullet-proof, though full support is available. MLS can supply the entire system: the software, barcode reader, barcode labels; 400 bar-coded membership cards for the readers plus the computer itself. Three types of system are supplied: A7000+, Risc PC or Riscstation-based.

The system functions over the network and provides full searching facilities on the books. Entering data on books is easy, and MLS can provide a special package called *Magicat* which allows faster input of books simply by entering the ISBN.

The basic system costs £695+VAT and the A7000+ bundle is £1625+VAT.

MLS are on: 0161 449 9357; e-mail: [info@microlib.demon.co.uk](mailto:info@microlib.demon.co.uk); Priory House, Ellesmere Avenue, Marple, Stockport SK6 7AN.

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# Time tunnel

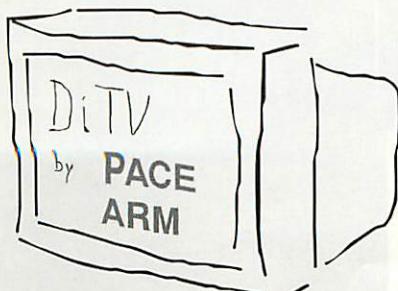
**I**t's the year 2010 and you've just selected your evening's television program on your voice-controlled digital communications server in the living room...

This is the BBC History Channel. In this documentary program we look back at the early days of Digital TV at the beginning of the new millennium and interview some of the pioneers of our modern communications systems.

As the year 2000 dawned the world was becoming increasingly dependent on the PC, the desktop computer driven by Microsoft's Windows operating system. Yet the seeds of its demise had already rooted and were beginning to grow into shoots. The United States Supreme Court had just ruled against Microsoft in a monopoly case brought by their own government, and the first two super-viruses, Melissa and the Love Bug propagated via the Internet, had wrought havoc in companies across the whole globe, costing them billions of dollars in lost trade.

Yet in Britain a dedicated band of enthusiastic developers were working on the systems that have become the mainstay of our current digital communications system. The ARM processor, originally conceived by Acorn Computers Ltd in Cambridge, was already a world-beater.

Now under the control of ARM Ltd and its conscientious Managing Director, Robin Saxby, it was already the preferred favourite for both mobile phones and DiTV equipment.



*Paul Richardson explores some future history*

Pace Micro Technology Ltd had acquired the old Acorn operating system and were buying up all the expertise available among programmers who knew how to drive it. Their strategic alliance with RISC OS Ltd at the instigation of General Manager Richard Nichol, enabled the companies to produce the first DiTV system which satisfied the British Government's requirement for interactive feedback – a pre-requisite for a licence application in the second round of bidding.

Now other multi-national companies came beating a path to their door and the shareholders of RISC OS Ltd became overnight millionaires as they saw their products snapped up in global licensing deals.

Over the next five years countries around the world saw the rolling out of the new Video on Demand technology and the traditional broadcasting of programs became a thing of the past. The British designers were never household names, but their trademark was their strategy of making the hardware and software serve the needs of the end-user rather than control and dominate them. The progenies of Charles Babbage and Alan Turing were at last to reap their rewards.

As the Hate-Bug virus swept across the world's stock exchanges early in the year 2001, bringing them to a grinding halt, companies in their droves, were starting to ditch PCs. What had seemed the essential business tool had become such a liability that no company could afford not to implement an alternative solution.

Once more, Pace was ready in the wings. It had a robust operating system and its new range of

StrongARM powered NCs were just what the commercial world was looking for. Their Project Manager, Gary Stephenson, had galvanized the old Acorn developer companies into action and the file translation and compatibility of their software enabled most companies to transfer their data across in days instead of the months it would have taken to eradicate the super-viruses from their PCs.

Too late, Apple was caught off guard. Not only was the PC in terminal decline, but Apple's implementation of Microsoft's Internet standards left them open to the same back-door attacks. In a landmark case, both Apple and Microsoft found themselves in court charged with using browser code which reported back to them confidential information about the computer's status and installed software. This loophole was judged to be the main point of entry for the hackers who were creating the super-viruses, and their fate was sealed.

By the beginning of 2002 in Britain the new Conservative & Liberal Democrat Alliance was pushing forward their proposals to use the huge licence fee payments from the mobile phone and DiTV companies to invest in a countrywide network infrastructure. Not only did it win them the election, but it also ensured that it was to be British, and not American, technology which was to become the de-facto standard for world communications.

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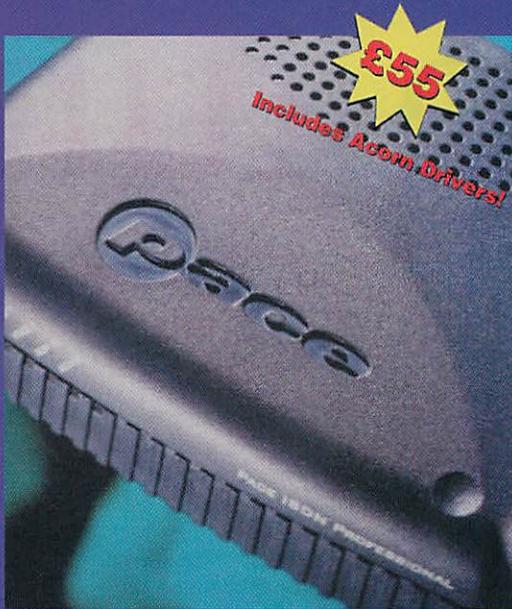
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TECHNOLOGIES

# WAP – It's your deal

The UMTS/3G mobile phone licences have been competed for, won and issued, and Wireless Application Protocol or WAP mobile Internet technology seems to be a solution looking for an application. The *WAP Forum* ([www.wapforum.org](http://www.wapforum.org)) defines it as "the world standard for the presentation and delivery of wireless information and telephony services on mobile phones and other wireless terminals".

The microbrowser in a WAP phone is a relatively simple low-bandwidth system that only communicates with a WAP Gateway set up by the mobile network operator. The Gateway handles all the processor and time-intensive complex interfacing with normal Web resources, such as a domain name

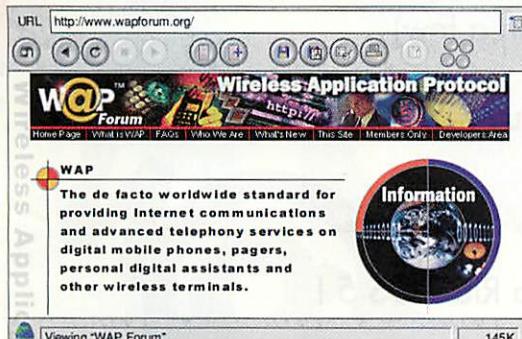
resolution, URLs and encoding of the received Web pages into the simpler binary form required by a WAP browser.

WAP browsers use Wireless Markup Language (WML) which adheres to XML standards of elements and attributes, and has similarities to HTML but is designed for use with small screens and simple keypads. To keep content and bandwidth low, WML uses the concept of a pack, or deck of cards. The whole document is called the deck, and individual sections of interactivity with the user are called cards.

WML pages written in plain text are encoded by the Gateway into compact binary form to be sent to the WAP microbrowser. Multiple screens or cards can be downloaded together in one fetch, with routing to already loaded cards reducing the number of transactions through the Gateway.

A good explanation of WML and examples of coding can be found at [www.wirelessdevnet.com/training/WAP/WML.html](http://www.wirelessdevnet.com/training/WAP/WML.html)

WAP gateway ISP *Fonedata* ([www.fonedata.com](http://www.fonedata.com)) operates a free common WAP access point from all the UK mobile networks for registered users. Whether we really need it or not, WAP looks like being a done deal.



Read all about the World Wide WAP

## Rick's World

Richard Murray doesn't mind being called a geek but behind the label he's a pretty cool character with many redeeming features: Astronomy, cooking, reading, and a cocktail all accompany a deep interest in RISC OS computing and strong cheddar.

Rick owns classic Acorn machines in abundance but knows only too well the problems of 4Mb RAM with Internet access software like Argo Interactive's *!Voyager*, which ideally requires 8Mb. With this in mind, for *Voyager* users he has developed *!QuickVoy* with most of the functionality of *Voyager*'s own dialler in a fraction of the memory space.

Bonus features are a *Fresco* cache scanner, JPEG image viewer, phone

bill generator, system settings report, a simple web fetcher and a basic e-mail writer, all of which are explained in the generous if slightly daunting Help file. The *Argo Voyager* package must have been 'seen' before *QuickVoy* can run, and some new features require setting up.

*QuickVoy* is not supported by Argo Interactive, so for all enquiries, queries and comments and to download the program, and to find out more about Rick, his world and his philosophy of life, visit Rick's World Web site at:

[www.heyrick.co.uk/ricksworld/](http://www.heyrick.co.uk/ricksworld/)



## In brief

### Totally bored!

If you're fed up with your usual Web sites, or want something to do with your new unmetered Internet access time, drift to [www.bored.com](http://www.bored.com). Here's a collection of interesting, useless and silly things to do with your time.

At the *SodaConstructor* build an online robot, or browse *The Joke Index* and subscribe to *Laff a Day* by e-mail. You can even send virtual ice-cream to your friends and enjoy popping online bubblewrap.

### Click and wow

That's how *British Telecom* are describing their own-brand ADSL service provider *BTopenworld*, opening this summer. Home users will pay £39.99 a month (inc VAT) for the always-on service that can share an existing phone line.

BT emphasise the content possibilities of their consumer portal which will offer subscribers streamed video and stereo sound at up to 2Mbps downstream. BT's ADSL combined USB *Openworld* modem and phone line splitter may persuade some Acorn-only subscribers to defect. Register at [www.btopenworld.com](http://www.btopenworld.com)

### Digging for the truth

*SamSpade.org* hosts free online tools and utilities written by US-based creator, Steve Atkins of Cambridge, Massachusetts.

Steve offers search tools such as whois domain name registration searches, trace-route listings and IP block ownership details. The reverse DNS search can reveal forged and bogus DNS entries, and the *Blackhole* check looks up a server from known spam sources.

*The Library* lists texts of the art and techniques of Spam hunting. Dig around and see what you can turn up at:

<http://samspade.org/>

### Contacting me

David Dade:  
[comms@acornuser.com](mailto:comms@acornuser.com)

Still waiting for the bugs to be fixed in RISC OS 4 before you upgrade?

Yes: We use Acorn Advance at school and that doesn't work does it!



Oh yes it does! Acorn Advance is now fully compatible with RISC OS 4 thanks to a patch that is available from Clares Micro Supplies Web Site.

<http://www.claresmicro.co.uk/>

*Great, but no-one is developing new software, and I can't do my Internet Banking on my Acorn.*

Oh yes they are! Softease, for one, are developing a major new educational title, Cerilica will be launching Vantage very soon and new versions of TechWriter and EasiWriter come out so fast, it's unbelievable!

As far as Internet Banking is concerned, you can now get 128bit SSL support for the ANT Internet Suite / Voyager, and Castle will soon be launching a brand new Web Browser.

Oh, and in case we haven't mentioned it before there are now over 2500 RISC OS 4 users out there now in the England, Scotland, Wales, Ireland, Holland, Germany, France, Belgium, Norway, Sweden, Denmark, Israel, Russia, Iceland, Australia, New Zealand, Hong Kong, Japan, Korea and South Africa (to mention a few)

Is there anything else you are waiting for before you buy RISC OS 4?

Yes, when will RISC OS 5 be out?

Well, if you don't buy RISC OS 4 first, there won't be a RISC OS 5!

OK, I'm finally convinced. How do I buy RISC OS 4?

Contact your usual RISC OS Dealer or look at the RISCOS LTD web site for an order form, or phone the RISC OS 4 sales line on 029 2049 2324 Mon - Fri 10 - 5

RISC OS 4 costs £120 including VAT and postage.

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# Going totally dotty

This is the kind of application that is likely to drive you mad – or at least cross-eyed. Do you remember those 'Magic Eye' pictures that were all the rage in the 1990s? Well, 3Dpics will allow you to create your own, either for your own amusement or to infuriate your friends.

Some people seem to be able to see them easily whereas others remain blind to their optical curiosity. Now you can experiment to your heart's content, either doodling to create a 3D masterpiece, or practicing how to squint your eyes in order to focus on their coloured dots.

Ray Middleton's RISC OS Magic Eye, or more accurately 'Random dot stereogram', creator is one of the best RISC OS applications of this type that I've discovered. Most require you to create a picture using *Paint* and merely convert it into a magic eye image. However Ray's version allows you to doodle yourself by using a variety of *Paint* style tools.

A single window consists of a main drawing area and a selection of

tools. A wide selection is available too: fine lines, thick lines, straight lines, squares, parallelograms, circles, ovals, triangles and segments. All of these shapes can be drawn in outline or filled in. A fill option does just that and a text option lets you enter text using any of the normal RISC OS outline fonts, at any point size.

Unlike a regular painting package though, the choice of colours – and 3Dpics lets you choose from the 16 desktop ones – is not for aesthetic appeal but for creating the 3D illusion of depth.

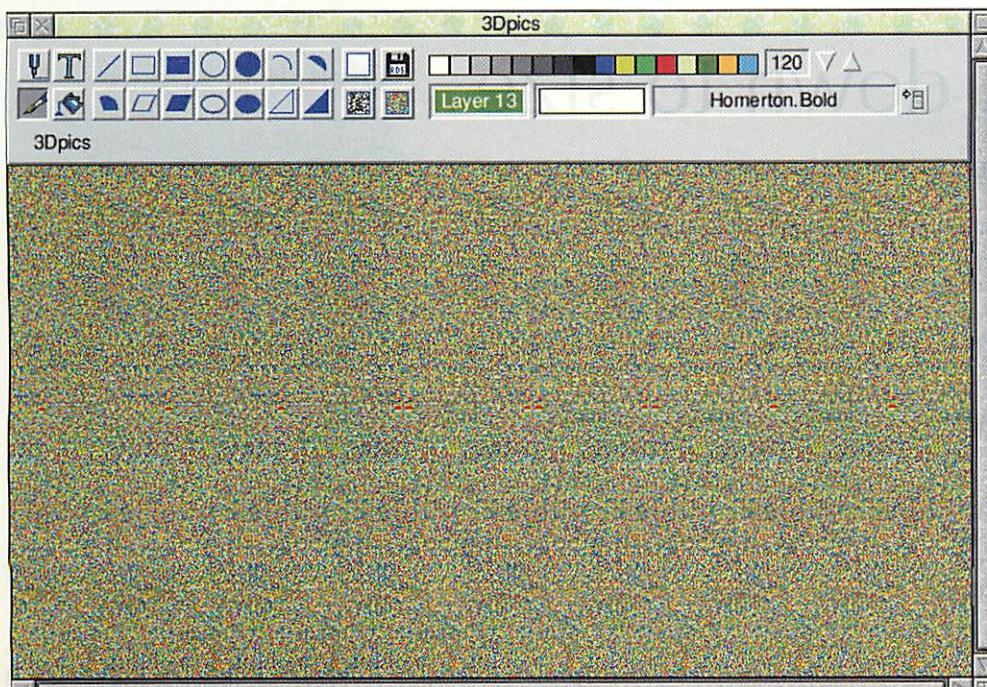
Starting with 0 for white and

ranging through to cyan at 15, the various colours correspond to the different 'layers' in the image. The best way to visualise this is to imagine a series of steps coming out of the screen. Everything at level 0 (white) is at the lowest level (the horizon if you like) and everything cyan is nearest to you (sticking out of the screen). The colours in between graduate between the two extremes.

Once you've created your scene, you have the choice of creating a black and white, or colour Magic Eye picture, which can then be saved as a standard sprite file for printing or importing into another application.

Of course, trying to describe in words, what some people have difficulty even seeing, is not the easiest of tasks so why not whiz over to Ray's Web site at [www.stargaze.force9.co.uk/copernicus/dload.html](http://www.stargaze.force9.co.uk/copernicus/dload.html) and download a copy to experiment with.

The output is surprisingly good – assuming you can focus your eyes in order to see them. Although you can 'undo' the random dots, there is no easy way of deleting mistakes on your actual drawing. You either need to use the background colour to rub out errors or clear the canvas and start again. But with a bit of practice some interesting images can be created.



Now you see it now you don't

# Gem of a utility

*MagPi-Mo* is another little gem from J. David Barrow (Dacha) and yet another useful application that I'd previously heard about but not got around to actually trying for myself.

The unusual name itself is derived from the three key utilities included; A desktop MAGnifier, a Pointer Info window and some handy MOuse utilities. The magnifier can more than adequately replace the standard RISC OS magnifier or *CloseUp*. It offers eight levels of magnification in either a handy fixed-size viewer window, or a fully re-scalable window. In addition you can

Pi, pixels			
Ptr-S	880	,	736
Ptr-W	290	,	-126
Whan	39261145	Ihan	19
<b>MagPi-Mo'</b>			
Wsize	325	×	288
W so	0	,	0
W wa	325	×	333
Wflag	87 03 00 12	Icons	44
b1 f7 ..s e0 b0 harl hfBV hbsT			
Isize	122	×	20
I pos	197	,	-130

Pointer information with all details shown

configure the colour of the cross-hair, to suit your choice of detail.

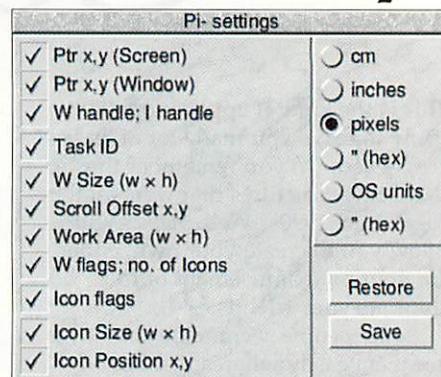
A useful additional feature is the ability to invert the zoomed view, which can actually be quite useful with some detailed areas of the screen.

The second feature of *MagPi-Mo* is the Pointer Utility – the Pi of the title. Probably of more use to programmers, but also to people trying to do detailed graphics without the aid of a grid is a window of pointer information.

The info displayed really is comprehensive. Everything from pointer coordinates to a wealth of icon, window and application flags and values for whatever you happen to be moving the pointer over.

Of course, if this is information overload for you, an additional Choices window allows you to configure exactly how much, or little, information is actually displayed, so you can customise to your heart's content.

Full details of the various flags and parameters are provided by the Programmers Reference Manuals (PRMs) which most programmers should have anyway, but others are



Decide what's shown in the 'Info' window

self-explanatory, being various window and icon positions/sizes.

Lastly, the mouse utilities give you eight different mouse step sizes – mouse speed to you and I – and also a useful ability to 'lock' the X or Y movement by holding down the right 'Alt' key. This is indispensable if you're trying to draw straight horizontal or vertical lines in a freehand drawing mode.

All in all, *MagPi-Mo* is a worthy addition to your desktop utilities, and one I'm surprised I haven't stumbled upon before.

Download it from David's site at [www.dacha.freeuk.com](http://www.dacha.freeuk.com)

## Cutting it down to size

*Chopper* is a utility I went specifically looking for, after seeing some requests for such an application on the Acorn Internet newsgroups.

Sometimes there comes a time when you want to transfer a large file from one machine to another, and if you haven't networked the machines together the simplest method is to simply copy the file onto floppy disc and physically carry it from one machine to the next.

If the file happens to be bigger than the size of a floppy disc – not unusual in this age of multimedia and ever-increasing file sizes. Luckily RISC OS datafiles are generally smaller than their PC equivalents, but there comes the time when it's just too big to fit that floppy disc. If you're lucky you could

compress the file using *SparkFS* or one of the other file compression utilities but what if the resulting file is still too big?

If you don't have a removable hard disc or zip drive, the only solution is to split the file into handy chunks and store it on more than one disc.

*Chopper* allows you to set the maximum 'chunk' size (ranging from 640K up to 1.66Mb) and will then split any file dragged to its icon into a number of conveniently sized chunks. Joining the file back together again is simply a case of reversing the process and dragging the first part back onto *Chopper*.

*Chopper* is written by 'Sprow' and available to download from [www-users.york.ac.uk/~rps102/bbc/riscos.htm](http://www-users.york.ac.uk/~rps102/bbc/riscos.htm)

## DigitalCD update

Andre Timmerman's excellent *DigitalCD* has had yet another update. The internal disk sample, *AudioMPEG* and *Timplayer* modules have been enhanced.

*DigitalCD* is one of the best multi-purpose, MP3, audio CD and 'tracker' players available for RISC OS, and it's certainly the one that is undergoing constant development.

Along with a rapidly growing collection of PC 'skins' you can download *DigitalCD* from:

[www.geocities.com/SiliconValley/Horizon/4471/dev.htm](http://www.geocities.com/SiliconValley/Horizon/4471/dev.htm)

## Contacting AU

Paul Vigay:  
pdpage@acornuser.com

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On behalf of Mencap

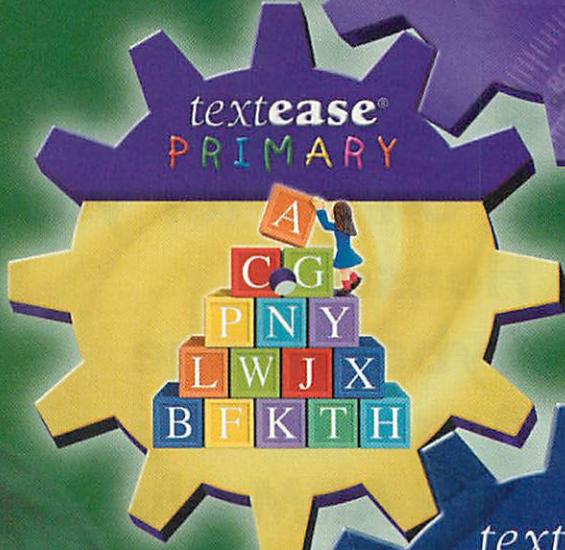
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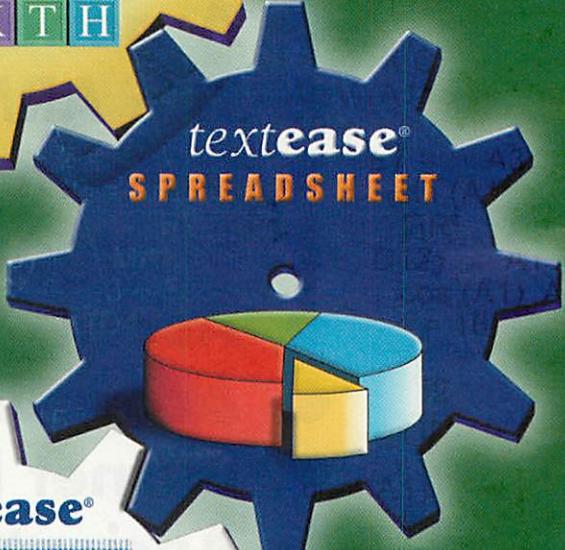


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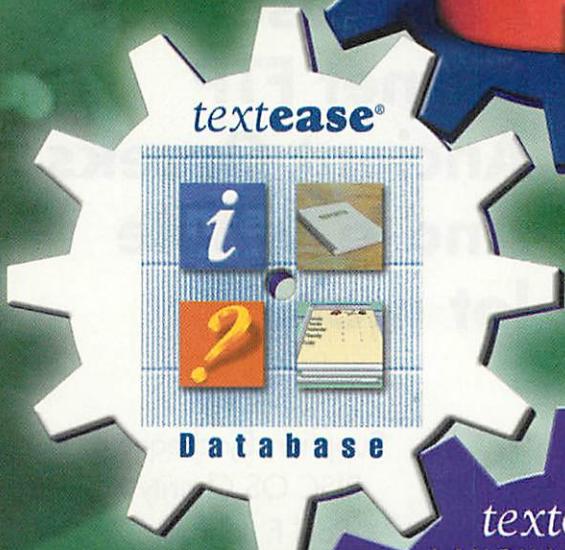
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# Updates and promises

With the Wakefield Show comes a glut of products over which to dawdle like Marge Simpson in a supermarket. iSV Products' speedy update to *DrawWorks Millennium* – it's now *New Millennium* – brings a host of features which even further enhance the venerable *Draw* application, including full on-screen anti-aliasing, 24-bit TIFF export, a metaliser tool, bitmap tracing, soft-edged shadows, WMF export and improved EPS conversion.

Unbelievably, the price of the new package (which still contains far more than just the core application) is only £40 for a single-user version, with upgrades from *DrawWorks Millennium* a snip at £20. What's more, you can't seem to stop Rob Davison from adding increasingly

interesting features to *Composition*.

At the time of writing, the public test version stands at 1.18j, and includes an automatically generated button bar allowing the user to run CompoScripts with a simple click.

The beginnings of support for animations and simple presentations are provided, and undoubtedly these features will continue to be developed in the coming months. See [jove.prohosting.com/~compo](http://jove.prohosting.com/~compo) for details.

News from the *Photodesk* users' mailing list suggests that Spacetech haven't altogether ceased development of their package either. Spacetech are understandably reluctant to court any allegations of "vapourware", so no concrete details are available, and any substantial commitment to development needs

to be weighed against the buoyancy of the RISC OS market.

Many users, myself included, have expressed the opinion that even the release of further effects packs would renew interest in the package, but we'll have to wait and see.

## Online galleries

There's an interesting collection of image manipulation carried out in *Photodesk*.

Liz Leyden's site dedicates a large section to work she's created from scanned photography or public domain. You can see her work at [www.argonet.co.uk/users/lizleyden/manip/manhom.htm](http://www.argonet.co.uk/users/lizleyden/manip/manhom.htm)

If you have your own online portfolios you'd like to bring to a wider audience, do contact me.

## Soft shadows

Traffic on the newsgroups suggests that methods for generating soft shadows using *Photodesk* aren't abundantly clear. So, I thought I'd take this opportunity to run through the technique I've been using for some time, which works in either *Photodesk* 2 or 3, as it doesn't require layers.

The first thing to do is mask out the part of the image you want to shadow, and invert the mask if necessary so that the mask covers the background (Figure I). Using the *Channels* dialog box, ensure that the alpha channel no longer operates as the mask (otherwise the shadow

won't show up), and ideally make the channel invisible.

Next, click the scissors icon and the copy tool (two rectangles side by side). This brings up the *Copy* dialog box: in the Selection panel, there's a menu titled Name – this brings up the *Selection* menu, from which you should Load from the Alpha channel (Figure III). Now the area which you're copying is taken from the unmasked parts of the image.

Select the small shadow icon under the Paste panel, and a further Shadow panel appears. Change the settings as you see fit – I find a *Shadow* setting of around 60-70% and a *Diffusion* of 20-30% works best for most images. We're nearly there. You

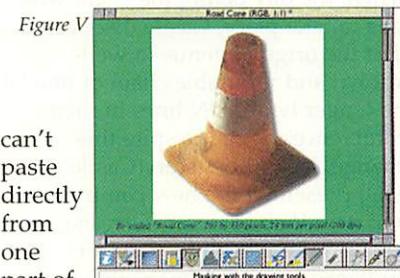


Figure V

can't paste directly from one part of the image onto the same image and create a shadow simultaneously, so the area you've selected needs to be copied to the Clipboard. The Clipboard icon on the toolbar does this directly (Figure IV), and retains the outline path for re-pasting for the life of the image (*Load from – Selection* in the *Selection* menu).

For the time being, that selection is already made, and you can create your shadow immediately by just clicking the Tick icon on the toolbar (Figure V). Voila!

Figure IV



Figure I

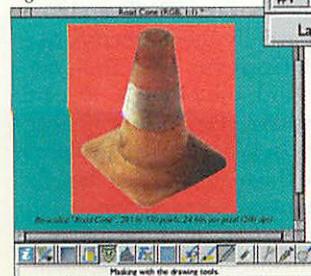


Figure II

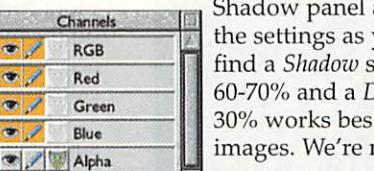
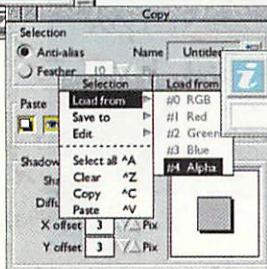


Figure III



## Contacting AU

Andrew Green:  
[graphics@acornuser.com](mailto:graphics@acornuser.com)

# KINETIC

**A** week before the Wakefield show and a bare six days before this issue of *Acorn User* had to go to the printers, Castle Technology launched their new *KINETIC* Risc PC to the RISC OS press. This is the first new hardware to be launched that improves on the Risc PC and, as such, opens the way to the future, encouraging us that there is development going on that will ensure the future of RISC OS.

The launch itself was held in Cambridge, having been shifted at the last minute (almost literally) when, the day before the event was due to take place, Castle discovered that the original venue (a well-known and reputable chain of hotels) no longer had ISDN lines in their conference rooms. Despite this change, Jack Lillingston (Castle's MD) presented the new computer and new Web browser (*Oregano*, see review on page 32) to an eager audience from each magazine with an interest in the RISC OS market (including *Computer Shopper*).

## Castle Technology

Castle were formed in 1993 and are

*John Pettigrew gets the low-down on the latest speed-up*

now, as they were then, entirely dedicated to the RISC OS platform. Their first product was a new keyboard for Acorn computers, but they soon became Acorn dealers and developed their own IDE and SCSI interfaces. By 1998, they had become the largest Acorn dealer. After Acorn pulled the plug on their desktop computer division, Castle gained the licences to manufacture and sell first the A7000 and then the Risc PC.

The *KINETIC* Risc PC takes this base (reselling what are essentially the old Acorn computers) and moves to the next level – designing, manufacturing and selling improved hardware. The improvement gained from the *KINETIC* Risc PC means that applications run between two and four times faster. This is comparable to the difference between an A5000 and a StrongARM Risc PC!

There was great debate on the Acorn newsgroups the week before the launch because Castle's Web site

had apparently displayed the specifications of the new machine by accident. John Ballance (Castle's Technical Director) told me that this should act as a warning to everyone with a Web site – even if pages are not linked from anywhere, someone somewhere will find them.

## What is it?

It is generally agreed that there are three main problems with the hardware of the Risc PC. The first two are the IOMD and the VIDC, which are special chips that handle the memory access and video control, respectively. These are now very hard to obtain, relatively expensive and run more slowly than many people would like – dependence on these chips is built into RISC OS and is one of the main things RISCOS Ltd is working to remove.

The third handicap is the speed of the bus on the motherboard, which is 16MHz. These days, even low-end PCs have a 66MHz bus and speeds of 100MHz and higher are becoming more common. In addition, the RAM on the motherboard is fairly slow at accessing its data (even though it's called 'fast-page-mode' RAM).

The *KINETIC* Risc PC simultaneously attempts to remove the bottleneck of the IOMD and to alleviate partially the motherboard bus speed. However, apart from the processor card, the *KINETIC* Risc PC is the same as a standard Castle Risc PC (Figure I). What Castle have done is to move the memory from the motherboard onto the processor card. The *KINETIC* uses the much faster SD RAM, in the form of small-outline memory modules, which are

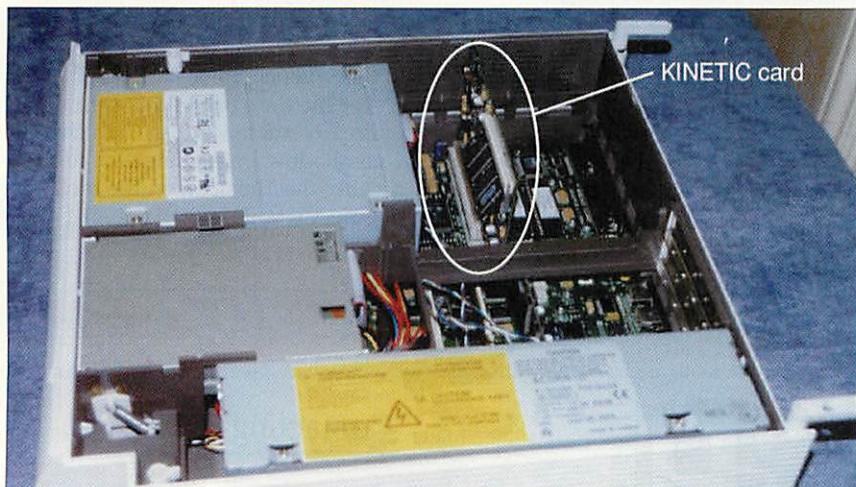


Figure I: So, all we have to do is plug-in the new *KINETIC* card?

# energy

commonly used in laptop computers.

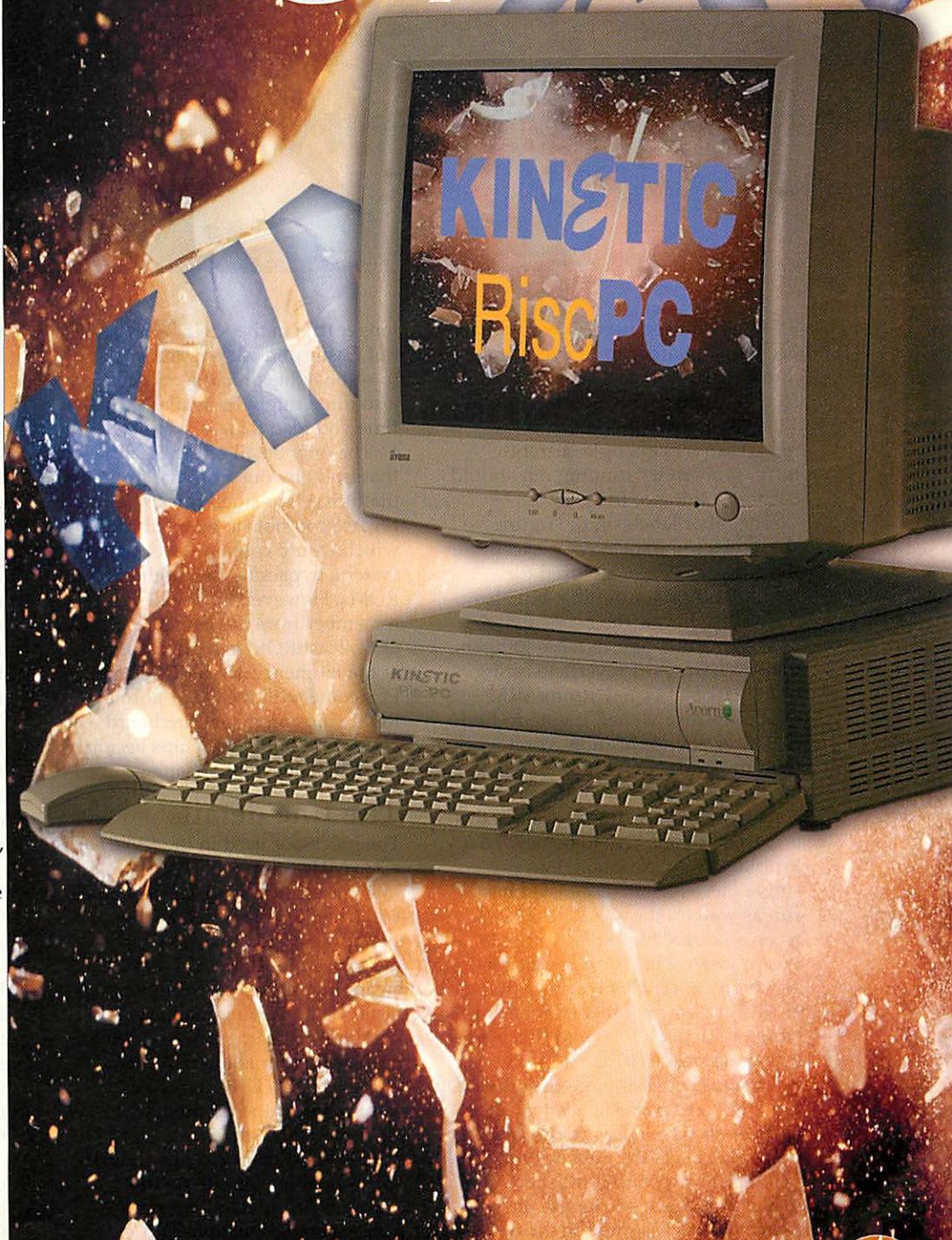
Moving from accessing memory at 16MHz via the motherboard bus and IOMD to accessing it at 66MHz directly on the processor card means that a *KINETIC* Risc PC can theoretically run up to four times faster. The actual speed-up that you will see will depend on how much the processor is being held back by the slow memory. Because of the change to the way memory is accessed, the *KINETIC* Risc PC also has a new version of RISC OS – version 4.03. This is the same version number as ships with RiscStations but is in fact a different build.

## The Stealth card

The processor card itself was codenamed 'Stealth', and the production cards carry the identification 'Stealth 1'. This is in part tribute to Castle's policy of not announcing anything before it is ready. Indeed, the demonstration machines at the press launch were not prototypes but part of the first production run of *KINETIC* Risc PCs, ready for sale at Wakefield. Also, because the only change between the normal Risc PC and the *KINETIC* machines is the processor card and OS version, the Stealth card is also available as an upgrade to existing Risc PCs.

The Stealth card is shown in Figure II and is substantially larger than the standard StrongARM processor card. This is because it has to fit all the same components plus the new RAM and custom-made silicon to control this memory.

This shows why SO DIMMs were used in the card: space. If standard



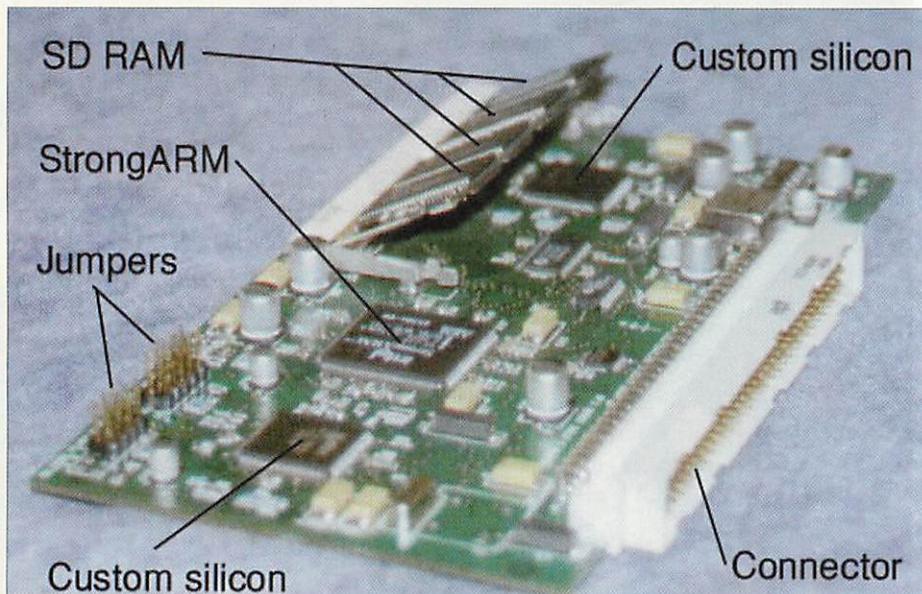


Figure II: Compact design makes the card big but not too big

SIMMs had been used, it would have been much harder to fit everything into a Risc PC's case! The *KINETIC* Risc PC comes with either 64 MB or 128 MB of SD RAM, which is far more than most people currently have, so memory running out should become a thing of the past.

The other labels on the figure should be self-explanatory, except for the jumpers. These are used for testing and programming, but also have a use for us, the users. By connecting one pair of these jumpers, the *KINETIC* card reverts to acting exactly like a normal StrongARM card. This means that, if you do find that a certain application won't work with the card, you will be able to boot up in 'old, slow' mode to run it.

However, according to Castle, this is extremely unlikely to be needed. With only one exception, every single piece of software tested has run as well on the *KINETIC* Risc PC as on a normal StrongARM Risc PC - except faster. This is quite a major achievement for Castle, given that most software expects memory to be handled by the IOMD and this is not true in the *KINETIC*.

That exceptional piece of software is the PC card, which is being worked on. The software running the PC card expects the memory to work in a certain way and it must act this way if Windows is to access the memory. This assumption is no

longer true in the *KINETIC* Risc PC, but Castle and Aleph1 are working to resolve this problem and, indeed, a solution might be available by the time you read this.

The only detail of the Stealth card that isn't obvious from the figure is that it is a two-sided card. The reverse has slots to take FlashROM, which would contain the operating system, bypassing the motherboard ROMs. However, most will remember from the launch of RISC OS 4, FlashROM is hard to come by at the moment and so *KINETIC* Risc PCs come with the OS in normal ROM chips on the motherboard. However, should the chips become available, this might change.

### The fine details

The processor used in the *KINETIC* is a 233 MHz StrongARM revision T. This means that *KINETIC* machines will be able to use the lazy task swapping option that was introduced in RISC OS 4. Lazy task swapping makes the computer run faster by improving memory handling. This upgrade by itself has been selling for about £250, which makes the *KINETIC* look like an astounding value for money.

Even though the Stealth card has the SD RAM on board, there must still be a little memory on the motherboard to handle certain housekeeping functions and video,

so *KINETIC* Risc PCs will come with a 4Mb SIMM (or whatever's cheapest at the time) as well as VRAM. Those who upgrade won't be able to move all their RAM to other computers, although those with two SIMMs will be able to remove one of them.

The *KINETIC* Risc PC is designed to cope with up to 512Mb of RAM (256Mb on the Stealth card and 256Mb of FPM RAM on the motherboard), but it hasn't been tested to this level yet because Castle haven't been able to find sufficiently large memory modules. However, it has been found to work with over 300Mb RAM. The memory runs at 66 MHz on the Stealth card rather than the faster 100 MHz standard. This is because the StrongARM chip can only access memory at 66 MHz so there is no point using faster RAM.

Castle have also improved the boot-up procedure. Now, when RISC OS is booted, the whole operating system is transferred from the ROMs into the fast RAM. This means that RISC OS itself will now run at the faster 66 MHz speed. Despite having to copy RISC OS from the ROM to the fast RAM, Castle have reduced the minimum boot-up time (hot reset from Control+Break) from 8.3 sec to 6 sec.

Figure III shows a graph of some operations, comparing their speed between a StrongARM Risc PC (defined as 100%), an A7000+ (listed



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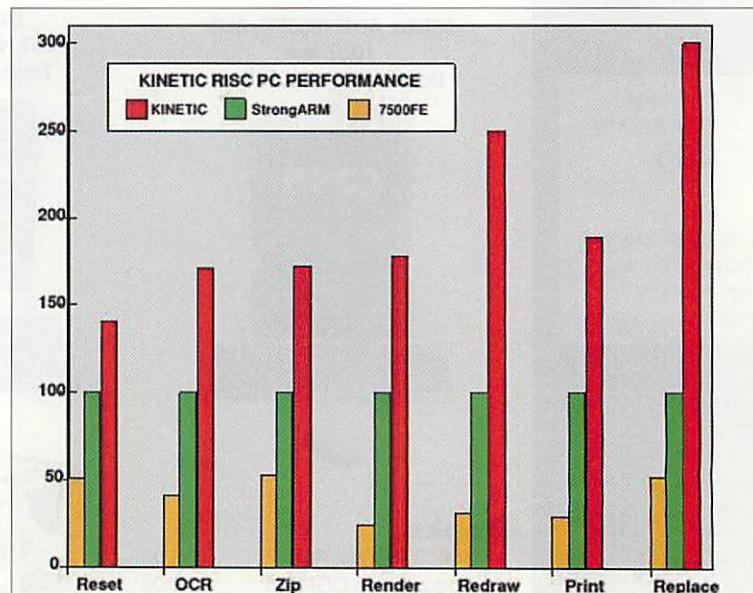
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Figure III: Okay, so how much faster does it actually go?



as 7500FE) and a *KINETIC* Risc PC. As you can see, some of the speed-ups are spectacular. Search and replace in Edit, for example, happens up to three times faster. Redraw speeds are over 2.5 times faster and, counter-intuitively, the higher the screen resolution, the greater the benefit.

That is, those who run their monitors at 1600x1200 will see more speed increase than those who run in 800x600. This is because the improvements are a result of faster memory access, so the more memory that needs to be moved, the starker the comparison between a normal SA Risc PC and a *KINETIC*. Another speed increase that will be welcome to many is that printing is also accelerated by about two times.

There appears to be only one downside to the *KINETIC* design. Because memory control has been taken away from the IOMD, most podule cards will no longer be able to use DMA transfer to gain the highest speeds. This is because, when the card asks for a section of memory, the IOMD won't know where to find it and so will refuse DMA. Well-designed cards should then simply default to non-DMA transfer but a few cards might have problems.

According to Castle's John Ballance, this problem should be easy enough for developers to get round, so DMA should reappear in the near future. Even so, for most

people, the increase in speed in the processing (and hence to desktop responsiveness) should more than make up for the decrease in speed for disk access. The only situations in which this is likely to be a real problem is for those streaming real-time video or similar from their drives.

## Impressions

When I got my hands on a *KINETIC* Risc PC to play with, I was impressed by the speed and responsiveness of the desktop compared to my own standard StrongARM Risc PC. It was particularly impressive to see the results of turning the cache off: on a normal StrongARM machine, this slows everything to a crawl (it takes several seconds to redraw the screen, for example), but on the *KINETIC*, even with the cache off, it redrew the screen in about a second.

The demo machines didn't have any really meaty software to try out – I'd love to try processing images in *Photodesk* and see how much difference it makes, but I'll have to wait.

## The future

From what I did see, this looks like being an extremely useful upgrade. Couple this with the fact that all new *KINETIC* Risc PCs will be bundled with *Oregano* and a 'get online' pack, and this looks like a definite move in

the right direction. Even though Castle are keeping their cards close to their chest about their future plans for their computers, they do admit that they are planning to keep improving the hardware. Their next targets are faster processors and up-to-date input-output and video, with other improvements such as USB and improved serial ports also on the cards. Some of these developments are obviously in parallel to those of other developers (for example, Microdigital with USB, John Kortink and his *ViewFinder* graphics accelerator card) and so how the field develops will bear watching.

However, it is clear that, with the launch of the *KINETIC* Risc PC, Castle are nailing their colours firmly to the mast, with the determination that RISC OS computers should continue to get better and better. More power to them!

END

## Product details

Product:	<i>KINETIC</i> Risc PC upgrade £399 plus VAT; basic <i>KINETIC</i> Risc PC £999 plus VAT
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# Getting it all together

This page sees the welcome return of what will hopefully become a regular update on what's happening in the Acorn and RISC OS user group and club scene. With all the action that's happening in the RISC OS world the user groups have their own valuable part to play in the expansion of our market.

The AAUG continues to provide support and publicity for all Acorn and RISC OS-related user groups. Our most recent event was the Wakefield Show 2000 which is organised by one of the longest established user groups – Wakefield Acorn Computer (User) Group.

The very next public event will be the Acorn South-East show on 1st July 2000 in St Albans where we will have all the usual information about our association of worldwide user groups, plus representatives of a few of the local groups to answer any questions you might have.

Following that, the second of the RISC OS Show in the Autumn will be the next major event in the RISC OS calendar – where the AAUG will

be showing off some more unusual uses for RISC OS technology. Those who remember the 1999 show will know that we had a commercial shipping radar system running on custom-boxed Risc PC, real time weather satellite data being fed from a dish outside the window, and the reappearance of the infamous Risc PC Pizza Oven slice.

You know it's impossible to estimate the value of the User Groups, as well as being the heart of the RISC OS enthusiasts, providing a backbone for the whole market, on a personal level it's a great opportunity to make friends and learn even more about the machines – as well as give the benefit of your

own experience to others.

Not only that but many of the big names in the market visit the groups and talk about their products – or anything else that might come to mind. It's a way of staying connected.

## Meeting spotlight

The July meeting of the Manchester Acorn User Group will be at 7:15pm on Wednesday 12th July. The speaker will be Graham Tattersall of Micro-Tech Ltd., a long-time RISC OS dealer based in Bury. The topic will be "Computer Fraud".

The talk will not be aimed directly at a RISC OS audience but should be of great interest to all, and visitors

## UK AAUG Club list

### Welwyn Hatfield Computer Club

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E-mail jstonier@argonet.co.uk  
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Where Panshanger Youth Club, Herns Lane, Welwyn Garden City, Herts  
When Every alternate Friday  
Subscription £4  
Coverage Welwyn and Hatfield

### Wakefield Acorn Computer User Group

Contact Chris Hughes  
Email [waug@cumbrian.demon.co.uk](mailto:waug@cumbrian.demon.co.uk)  
Website [www.cumbrian.demon.co.uk/wauc/](http://www.cumbrian.demon.co.uk/wauc/)  
Address 95 Cumbrian Way, Lupset Park, Wakefield, West Yorkshire  
Phone 01924 379778  
Where West Yorkshire Sports & Social Club, Sandal Hall Close, Sandal, Wakefield  
When 1st Wed of the month  
Subscription £10

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### Subscription

### Yorkshire

### Surrey & Sussex Acorn Users Group

### Contact

### Email

### Website

### Address

### Phone

### Where

### Suffolk Acorn Risc Club (SARC)

### Contact

### Email

### Website

### Address

### Phone

### Where

### When

### Subscription

### Coverage

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### RISC OS User Group Of London

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### Website

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### Greater London

### Nottingham Microcomputer Club

### Contact

### #1. Mike Johnson or #2. John Shelton

### #1. mike.johnson1@virgin.net or #2. john.shelton@virgin.net

### mnc.home.ml.org

### NMC, Woodthorpe House, Mansfield Road, Sherwood, Nottingham

### #1. 0115 944 7504 or #2. 0115 928 8641

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### North Kent Amateur Computer Club

### Contact

### Richard Nevill, Secretary

### [ricnev@argonet.co.uk](mailto:ricnev@argonet.co.uk)

invited include Greater Manchester Police Fraud Unit, local MPs and MEPs, Manchester Trading Standards Services, and others.

The venue – changed from the group's usual meetings – will be the Training Room, Sixth Floor, Manchester City Magistrates Court. Everyone is welcome, although you are asked to make a small contribution to the cost of the room hire. Entrance is via the Gartside Street car park; further directions and any changes will be available nearer the time on the Web site.

The majority of MAUG meetings are not planned far enough ahead to be listed in the RISC OS press, so if you might find future meetings of interest, do get in touch so that you can be added to the mailing list (whether by e-mail or otherwise). You won't be swamped with announcements but you will be kept informed of meetings.

## Other meetings and events

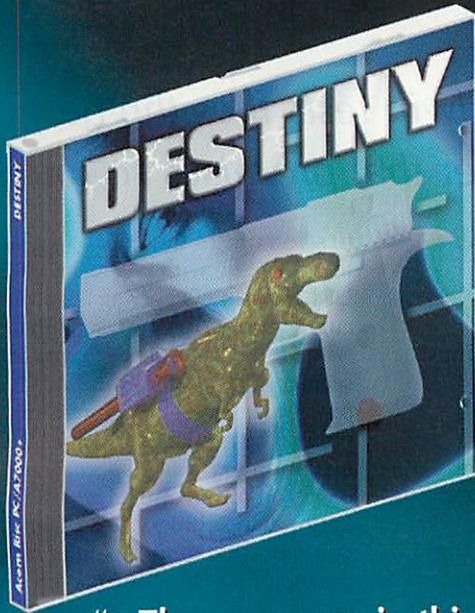
Date	Club
6th Jun	Blackpool Computer Club meeting
7th Jun	Wakefield – RiscStation Ltd: The Evolution
12th Jun	Surrey & Sussex – The Data Store – Products and Services (David Coronel)
13th Jun	Essex – Mike Williams of Akalat Publishing
13th Jun	Bottisham
27th Jun	Bottisham
30th Jun	Blackpool Computer
1st Jul	Acorn SouthEast Show
10th Jul	Surrey & Sussex – Update on Linux (Chris Sawer)
11th Jul	Bottisham
25th Jul	Blackpool Computer Club
29th Aug	Blackpool Computer Club
11th Sep	Surrey & Sussex – Reflex Technology – Acorn Spares and Service (Simon Abbott)
29th Sep	Blackpool Computer Club
9th Oct	Surrey & Sussex – RISC OS 2000 Briefing (Mark Smith and Geoff Arnold)

For more meetings dates, and details of meeting times and locations, contact the individual club or visit their Web site. All clubs details can be found on the AAUG Web site [www.aaug.net](http://www.aaug.net)

Website	www.humperdink.demon.co.uk/nkacc	When	University Students Union	and surrounding area	Bottisham Acorn Usergroup
Phone	01959 701435				Contact David McDowell
Where	Petts Wood Memorial Hall, Woodlands Way, PettsWood, Orpington, Kent.		Approx every six weeks, usually Tuesday or Wednesday evening – see website for details		Email mcdowell@intec.co.uk
When	Second Thurs of Month				Website <a href="http://come.to/aaug">http://come.to/aaug</a>
Subscription	£15 (£10 concessions) or £2 per meeting	Subscription Coverage	Greater Manchester, Cheshire, Lancashire, Yorkshire, Merseyside and Cumbria!		Address 8 Chestnut Close, St Ives, Huntingdon
Coverage	Kent, Croydon; Open to PC and Mac owners also				Phone 01480 381996
<b>Norfolk Acorn User Group</b>					Where Room 47, Design & Technology Building, Bottisham Village College, Lode Road, Bottisham, Cambs
Contact	Jonathan Balls				When 7:30pm 2nd and 4th Tuesdays of month
Email	naug@ballys.demon.co.uk				Coverage Cambs, North Essex, Beds, Suffolk
Website	<a href="http://www.ballys.demon.co.uk/naug/">www.ballys.demon.co.uk/naug/</a>				
Address	20 Rye Close, North Walsham, Norfolk. NR28 9FY	Address	Lincolnshire Acorn User Group		
Subscription	None. Some meetings may involve a small fee		Contact Dave Dunn	When 7:45pm 2nd Tuesday	<b>Bristol Acorn Risc User Group</b>
Coverage	Norwich & surrounds		Email lincsaug@softopt.freewebs.co.uk	Members 12	Contact Tony Cropper
			Website <a href="http://www.softopt.freewebs.co.uk/lincsaug">www.softopt.freewebs.co.uk/lincsaug</a>	Subscription £12	Email <a href="mailto:tony@cropp.demon.co.uk">tony@cropp.demon.co.uk</a>
			Address High Fen, Gosberton Clough, Spalding, Lincs. PE11 4JU	Coverage Essex	Website <a href="http://www.snav.e.demon.co.uk/">http://www.snav.e.demon.co.uk/</a>
					Address /BARUG/ 3 Thorndale Court, Bristol, BS8 2JA
					Phone 0117 973 6237
					Where The Long Room, Burden Neurological Institute, Stoke Lane, Bristol
					When Last Wednesday of the month at 7:30pm
					Subscription £7
					Coverage Bristol, Glos, South Wales, Wilts., Somerset
<b>Milton Keynes Acorn User Group</b>					
Contact	Paul De Luca		<b>Liverpool Acorn Users Group (LAUG)</b>		<b>Acorn Club North East (ACNE)</b>
Email	marc@alphapro.demon.co.uk		Contact Dr Fred Wilburn		Contact Alan Harvey, Chairman
Website	<a href="http://users.pownet.co.uk/deson/MKAUG/">users.pownet.co.uk/deson/MKAUG/</a>		Email <a href="mailto:laug@italia.co.uk">laug@italia.co.uk</a>		Email <a href="mailto:acne@aaug.net">acne@aaug.net</a>
Address	11 Cavenham, Two Mile Ash, Milton Keynes. MK8 8JP		Website <a href="http://www.italia.co.uk/laug/">www.italia.co.uk/laug/</a>		Website <a href="http://www.argonet.co.uk/users/esm">www.argonet.co.uk/users/esm</a>
Phone	01908 341032	When	Address 26 Roe Lane, Southport. PR9 9DX		Address 4 Penshaw View, Wardley, Gateshead. NE10 8BJ
Subscription	None		Phone 01704 530741		Phone 0191 4697200
Coverage	Milton Keynes, Buckingham, Bletchley and Bedford	Members	Where Birkhead Boys School, Birkhead		Where Heworth Hall Club, Heworth, Gateshead.
		Subscription	When 2nd Tuesday of the month. 7:30pm		When Last Tues of month, 7:30pm
		Coverage	Coverage 30		Subscription Free at present
					Coverage North East England
<b>Manchester Acorn User Group (MAUG)</b>					
Contact	Thomas Lowe		<b>Loughborough Acorn Users</b>		
Email	info@acorn.manchester.ac.uk		Contact Andy Boura		
Website	<a href="http://www.acorn.manchester.ac.uk">www.acorn.manchester.ac.uk</a>		Email <a href="mailto:lau@acornusers.org">lau@acornusers.org</a>		
Address	65 Victoria Road, Salford, Manchester. M6 8FZ		Address 5 Far Lane, Coleby, Lincoln. LN5 0AH		
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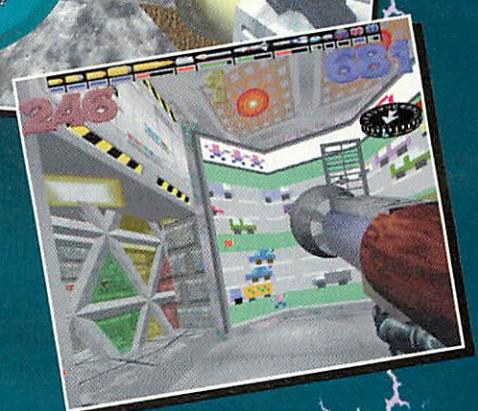
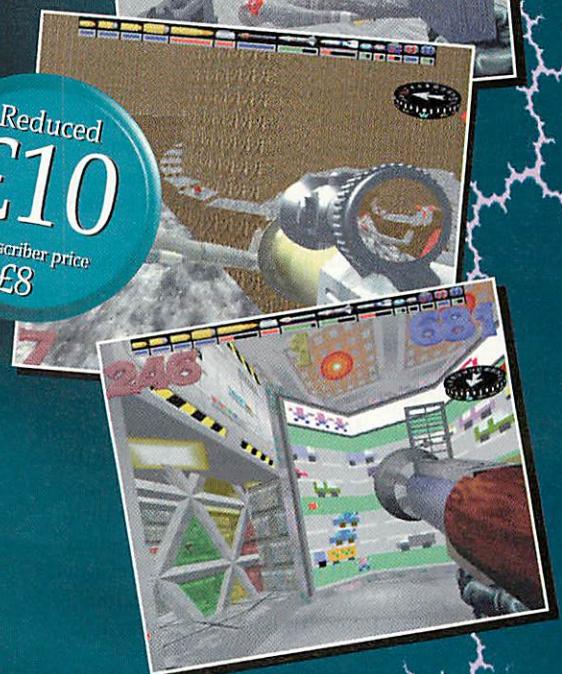
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# Delicate new

I won't insult your intelligence by waxing lyrical on the importance of the Internet in modern society; suffice it to say, any modern computing platform needs to be able to hold its own with regard to accessing this global communications network.

And RISC OS has not been without its contenders, with Web browsers such as *ArcWeb*, *Webster* / *Webster XL*, *WebSite*, *Browse*, and *Fresco* springing immediately to mind. However, as time passes all but one seem to have fallen by the wayside as far as updates are concerned, and everyone bemoans the fact that we just aren't keeping up with the likes of *Netscape* and *Internet Explorer*.

Enter the new kid on the block, *Oregano*. Perhaps "new" is a little misleading as it's been worked on for the past couple of years, but for the NC (network computer) market; however, it was not without a little frisson of excitement that I opened my e-mail to find a freshly compiled copy of the new desktop version, complete with beta status warnings,

*Richard Goodwin tests flies the new RISC OS browser that promises so much*

waiting for me to play with. After a brief flurry of activity on the newsgroups following the announcement of its impending release, this was already on my must-see list for the Wakefield show.

## First impressions...

The NC heritage is apparent right from the start; the dark toolbar and strange habit of displaying the "throbber" (the obligatory spinning globe that tells you when a page is being fetched) down in the bottom right of the browser window had NC written all over it. And where was the URL bar? there was no obvious means of typing in a web address, kind of a minus point for a Web browser.

A little investigation and it turns out that the current URL is displayed in the window's title bar, the page title in a space between the left and right hand icon groups, and you have

to select one of the icons to replace the page title with an area to enter a URL. I wasn't expecting a learning curve with a Web browser, but after a while it did seem that what at first seemed to be a hindrance could prove to be one of this browser's plus points; the minimalist toolbar leaves maximum browsing space, especially once you discover the *Dynamic toolbar* option which hides the toolbar until you move the mouse pointer up to the top of the window; it even slides up and down à la the Windows taskbar for added cool points. It just goes to show a little patience goes a long way.

As for the dark tools and windows, this should be taken care of via a little skinning – the current vogue for changing the look of a program by changing its icons and background images. Initially disappointed to find that this didn't work on my beta copy, I poked around inside the application's directory and found that by augmenting the default skin with a few files from some half-finished examples I soon had a passable fake of the *ANT Suite* version of *Fresco* and Acorn's *Browse*.

## ...and we're off!

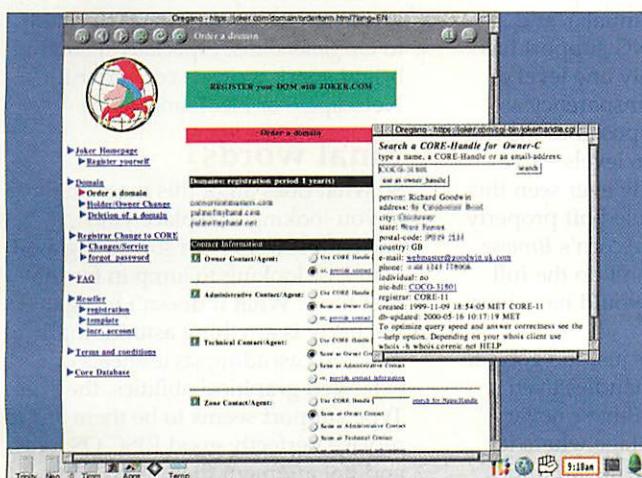
So, after a few false starts and some visits to the Choices window to switch on things like JavaScript, I'm ready to browse in earnest. I know what most people will be asking at this point – is it stable, and is it as fast as they say? And I have to answer right away yes, and *oh yeah baby!*

Over my aging modem at home it was hard to tell the difference between *Oregano* and close rival *Fresco*, except of course with the newer browser there was none of *Fresco*'s annoying habit of appearing to hang the machine while waiting for those last few images to



A page from the Oregano browser with its original skin

# flavour



E-commerce in action with a Javascript-originated pop-up window

download. To get a proper comparison I just had to take them in to work and spend much of the day Web surfing over the company's leased line.

Not only did *Oregano* load pages from machines on the local network pretty much instantaneously on my StrongARM machine (compared with *Fresco*'s pedestrian performance even trying to load pages from cache), I can honestly say that it didn't crash once while I was browsing – when I was fiddling with unfinished options, yes, but never when browsing. Your mileage may vary of course, some people have no problems with *Fresco*, but this stability even in a (late) beta version was quite refreshing.

Straight Web browsing is all well and good, but there are only so many times you can read the Slashdot site in any one day; it was time to start putting *Oregano* through its paces. Another area where RISC OS is perceived to lag behind is that of e-commerce, which combines slightly newer technologies such as SSL (Secure Sockets Layer for encrypted data transmission), cookies (for remembering your details) and perhaps even a little JavaScript. Although *Webster XL*, *Browse* and *Fresco* have recently been updated to handle some or all of these functions,

newcomer, a German site specialising in domain name registration that's only accessible using SSL right from the first page.

To cut a long story short, *Oregano* passed with flying colours – not only did the SSL module not stutter once (I've found some browsers to need a retry on every third or fourth page fetched), but it handled the small toolbar-less JavaScript pop-up window perfectly. It didn't allow for the *Internet Explorer* trick of pushing the data back into the main window from this pop-up, but I did find that I could cut and paste between writable icons which achieved the same ends.

The JavaScript implementation seems to be a particularly good one; simply not seeing errors when there might not be any error reporting option is one thing, but as a real test I tried it on a professional loan calculation site that *Fresco* is known to mess up on and it sailed through.

One of the really nice touches is that if you get any problems with a site complaining about you're not using *Netscape* or *Internet Explorer* then you can just select a faking option from a menu and hit the reload button – no need to quit the browser or use third-party hacks, it resets both the identity sent to the Web server and the JavaScript ID

support can be a little patchy and quite a few people who have to admit to using a PC browser for online shopping, myself included – it's real money at stake after all. I did a quick tour of the usual stomping grounds – Amazon.co.uk, eBay and so on – without incident but finally decided on a rather nastier test for the

straight off.

Rollovers are handled well too; this is where an image changes when you move the mouse pointer over it. *Fresco* doesn't blank the background when changing states, so with images that have transparencies in them you get leftovers from the previous image – not so *Oregano*.

## Could do better

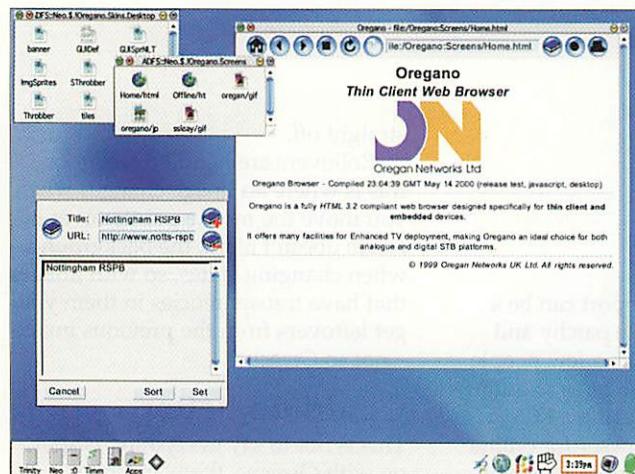
This is not to say everything is spot on with *Oregano*, there are some things I would like to see changed which can't be put down to being a beta version of the software given that it's basically a previously developed NC browser with a new desktop front end.

Table rendering is a black art at the best of times, and in some ways *Oregano* is better than other browsers; it managed to render Amazon.co.uk where *Fresco* renders the site twice as wide as the current browser window, no matter what size the window is. There were none of the padding and alignment glitches as with *Webster XL*. It even beat *Internet Explorer 5* on some pages.

On a few pages though it seemed to get the widths of columns wrong, which is not exactly a new experience but manifests in some odd places. It does however allow for images in the background of table cells, a first for RISC OS I believe; it doesn't do textures across an entire table or row, but I think this is correct according to the HTML specification.

The True Type font rendering is in place, but this seems to be a replacement for the standard RISC OS fonts rather than augmenting them. This system is good enough – it anti-aliases at least – but doesn't add the `<font face...>` command which so far has only been implemented in *Webster XL* under RISC OS, and the spacing/leading seems a wee bit out to my eye.

I copied over the Arial font files from my Windows 98 PC at work, renamed them, edited the browser's options and had everything rendering in the sans serif font straight away, no conversion, no fuss, which is a good test of adhering to standards, but I'd have liked to have seen multiple fonts on the same page,



Is your appetite whet? Try re-skinning Oregano to look the way you want

a must for that next big step towards cascading style sheets.

Also many named character entities came out as little boxes – I don't know if this was a problem with mapping between PC and RISC OS fonts, but it should at least be able to render a hard space properly. Plus unordered lists being done in the *ArcWeb*-esque coloured balls is cute on a standard black-on-white Web site but looks odd on a black background, and doesn't allow for things like square bullet points – the standard way is to use a symbol-style font to render bullets.

Image handling is fast and accurate. However, the trade-off is there's little dithering in 256 colour modes, and the display broke up altogether in a 16 colour desktop with text spewing across the bottom of the screen, so I quickly made sure I was using at least 32 thousand colours in the desktop when browsing. Given this and the use of dynamic memory areas only found in RISC OS 3.5 and above it limits the target audience to users of RISC PCs, A7000s and the newer non-Acorn hardware.

I guess there comes a point when developers have to stop supporting what is now perceived as obsolete hardware and just work with more current machines – a harsh truth but perhaps a necessary one these days, if a little ironic given that it's the older machines that could benefit most from such a speed boost.

Other graphical quirks are that it doesn't support `<img... width="100%">` required for using images as full-width ruler bars or pull off some of the fancier border

effects, the lack of support for BMP (okay, RISC OS browsers generally don't, but it's common in PC land) or Acorn Sprite (used in some RISC OS-only help manuals), and PNG support has only one level of transparency as opposed to the full 256 levels – I've only ever seen this pulled off properly in Acorn's *Browse*, even PC browsers don't do the full spec on PNG, but it would have been nice.

But this browser is just too good to end on criticisms; it handles even complex pages well. *Browse* never quite made it to the stage where it could handle text flowing around images and inline tables, but *Oregano* handles these at least as well as *Fresco* and with better spacing than *Webster XL*.

It also handles RISC OS plug-ins, even adding the details of things like Java and the recent Flash conversion on the fly to the ubiquitous "About" page if they're installed. Although Java loaded on request it didn't appear to kick in properly even with Java applets that *Fresco et al* could handle, perhaps a minor pre-release hiccup given that my copy of the browser came with *Oregano's* Web site set as the home page and, as they have a Flash intro on their site, the first page I saw using *Oregano* was a full-on Flash movie. Nice.

I couldn't resist a final poke around in the guts of the program to see what options were available, and try to figure out how to create skins; I managed to create something that gives a pretty fair emulation of the new Apple "Aqua" style desktop to go with the desktop theme I'm working on, even down to being able to colour the drop shadow around text entry boxes a nice shade of blue.

This is possible because the program implements its own writable icons rather than using the ones built into RISC OS, which will no doubt infuriate the purists and can lead to some slightly odd handling, but looks cool.

The whole system is extremely configurable (although the actual controls weren't finished in my version, I had fun with the raw text files), so I dearly hope that *Oregano/Castle* will release the full documentation for this system so that others can play too; it can only increase the popularity (and, by extension, sales) of the browser if Web sites start popping up devoted to *Oregano* skins, especially if some bright spark writes a converter for Netscape 6 or NeoPlanet skins.

## Final words

So what does all of this mean to those of you looking to replace your current browser with something a bit better, or looking to jump in for the first time? What it doesn't bring to the party is anything astoundingly new; no cascading style sheets or extended graphical abilities, the True Type support seems to be there just to replace perfectly good RISC OS fonts and not augment them with `<font face...>` support, and it's not quite up to spec on a few minor things including the RISC OS style guide.

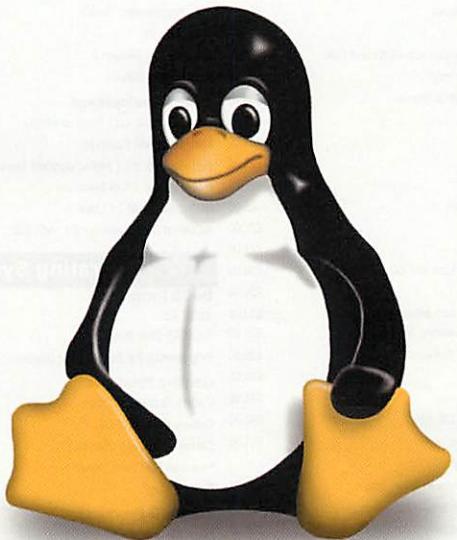
What it does do is handle the things it can do extremely well – the stability and speed of browsing surpasses anything that we've had so far, and JavaScript support seems to be the best yet on this platform. Its NC heritage not only brings something fresh to your desktop (such as being able to navigate pages properly using just the keyboard, oriental language support and so on), it should also ensure future development.

Very minor niggles aside, this could be exactly what the RISC OS community has been waiting for, and it's such a joy to use it's already replaced one or two of the icons pinned to my backdrop – I can't give it more praise than that.

END

## Product details

Product:	Oregano
Price:	£49 plus VAT
Supplier:	Castle Technology Ltd, Ore Trading Estate, Woodbridge Road, Framlingham, Suffolk IP13 9LL UK
Tel:	01728 723200
Fax:	0800 783 9638 (freefax)
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Languages CDROM

Linux Developer Resource Summer 1999

Math Toolkit

Moo-Tiff 2.0.1 for Linux

Programmers Heaven 2

Python Toolkit

Source Code Cdrrom

Tex (Informatik)

Tex (Walnut Creek)

Text (Walnut Creek)

Writing GNU Emacs Extensions

Writing Perl

Writing Perl/Tk

Writing Python

Writing Tex

Writing Text

Writing Writing

# Itanium logic

The forthcoming Itanium chip from Intel is gathering a great deal of attention in the major OS camps, obviously Microsoft is making a bee-line for the new 64-bit chip and is re-writing Windows to work on it but Hewlett-Packard, SGI and Red Hat are combining to put major muscle into the development of Linux for Itanium.

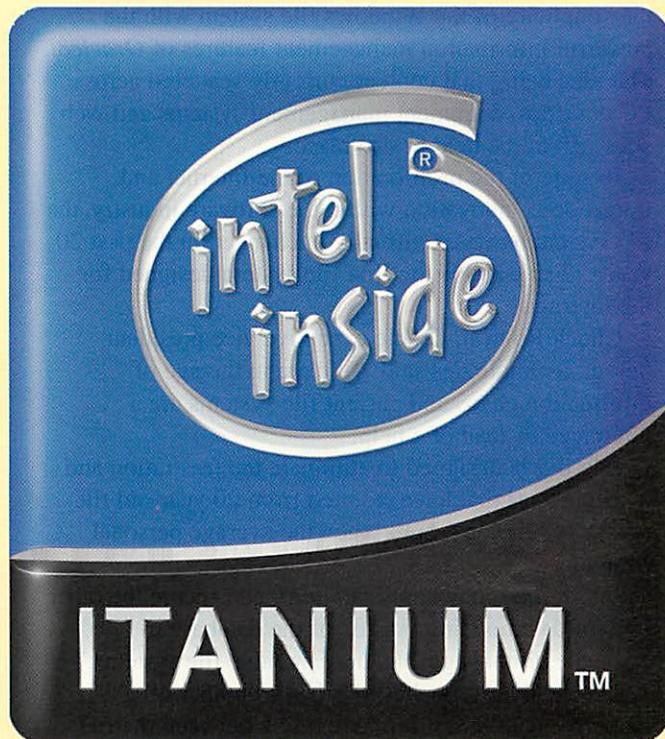
SGI – a maker and vendor of particularly powerful computers – has released its own compiler tools to help write software for Itanium computers, eagerly awaited by members of the Trillian (come back Douglas Adams all is forgiven) team who are creating Linux for Itanium.

While HP has the most experience with the details of the IA-64 architecture – they originated some of the original design – SGI is good with compiler expertise in other areas. "They have had historically very good compilers, and they have very good compiler people," said MicroDesign Resources Analyst Keith Diefendorff.

The release of the HP emulation software will be accompanied by compilers developed by Cygnus and supporting software libraries from Intel.

The moves are critical for Linux if it's going to meet the expectations of Intel and the market but developing software for the new chip isn't easy because there are only 3,000 Itanium-based computers in existence so far, and few Linux programmers can even get a peek.

The goal is that Itanium versions of Linux will be available at the same time Itanium systems ship later this year. Linux fits with Intel's philosophy of bringing



high-end technology into mainstream computers. Intel hopes the Itanium chip and its successors will bring Intel technology into expensive, high-power computers that previously were the domain of Sun, Compaq, IBM and SGI.

## Linux with a global voice

The Linux Internationalization Initiative (Li18nux) has announced that a draft of its long-awaited Globalization specification is now available on its Web site for public review.

Li18nux is a voluntary working group of Linux and Open Source-related contributors focusing on the Globalization spec "a combination of internationalization and localization. Formed nearly a year ago, the group is striving for international software and application portability and interoperability for Linux and other Open Source projects."

Li18nux activities concentrate on a core of Application Program Interfaces (APIs) and components which achieve a common international Linux environment. "This will allow an internationalized Linux application to be executed regardless of different

flavour of distributions are used".

As you would expect the group's efforts are open to everyone and are provided as formal proposals to the Free Standards Group (FSG) which is a combining of the efforts of LI18NUX and the Linux Standard Base (LSB) creating a unified Linux specification.

The LI18NUX2000 specification is described as including "the best of globalization functionality that commercial UNIX systems have successfully implemented." By conforming to the LI18NUX2000 specification, application programmers can use Unicode-based multi-lingual capabilities in a portable manner across Linux distributions and UNIX systems.

"The internationalization of Linux is a huge undertaking, but it is essential in order to support Asian

*Continued on next page...*



# Internet filing system

Oracle have announced availability of the Oracle Internet File System (iFS), which apparently combines the simplicity of the Windows file system with the powerful information management features of *Oracle8i*. The idea being that content currently scattered across PC desktops, document management systems and web sites will all be held in one place.

In spite of the proliferation of the Internet and tremendous innovation within the software industry, the file system has been virtually unchanged in the past 20 years. Oracle iFS is the first file system designed for the Internet.

Chuck Rozwat, Oracle executive vice president, Server Technologies said: "We are in the age of information chaos and current file systems are a hindrance instead of a help."

Oracle iFS is designed to eliminate the frustration and inefficiencies that have resulted from 20 year-old file system technology, built when the average personal computer had just 64K of RAM.

"With iFS, companies can unify and secure the other 99% of data residing outside of the database in disparate, unmanageable, unsearchable file systems."

Oracle claim that their iFS has a number of innovations in that it breaks the link between the file system and operating system. iFS frees files from the operating system so that they can be accessed from any popular. iFS delivers long overdue file system features such as versioning, check-in, check-out and advanced searching.

Secondly, Oracle is first to provide native XML support in the file system, providing companies with

the first secure and scalable means of managing high-volumes of XML files.

Thirdly, Oracle is the first to offer completely open Java application programming interfaces (APIs) to the file system allowing ISVs and developers to add, modify or override iFS's default features.

"iFS creates a platform that enables knowledge and collaboration vendors to focus entirely on functionality," said Elise Olding, Director of Research for Knowledge, eLearning and Collaboration at Hurwitz Group. Available immediately, Oracle iFS includes:

- Drag and drop filing: End-users simply point and click on a file and then easily drag and drop the file into iFS for database levels of searching, manageability and security.

- Management of over 150 file types: With iFS, information within documents may be stored as a particular file type, for example, a Microsoft Word document or an HTML file from a Web site. Once stored, this content can then be dynamically re-assembled into different file types at a later point in time.

- Browser-based access from any operating system: Users are not constrained by the standard *Windows Explorer* interface, they are free to access their files using a standard web browser. This is useful for remote access over dial-up lines or access from any other client machines such as Linux, iMac and UNIX.

Oracle iFS is generally available worldwide and is free with *Oracle8i*. iFS is available for immediate download to developers at Oracle Technology Network (OTN).

*...continued from previous page*

languages and other multi-byte character sets. This will enable Linux to fully propagate worldwide," said Metro Link President Morgan Von Essen.

Red Hat has been a keen supporter of the new standards. Said Red Hat CTO Michael Tiemann: "One of the great strengths of the Open Source software development model is that local engineers have been able to customize these technologies to best serve their local market needs. Coordinating these efforts will ensure these 'localized' versions also offer the ability to

use application software interchangeably with Linux users anywhere else on the planet."

The LI18NUX specification has apparently received official support from: Internet Language Corporation, Translation.net, Metro Link, Red Hat Software, Hitachi, IBM, Fujitsu, Compaq Computer, NEC, Aquarium Computer, Sun Microsystems, Omron Software LASER5, Project BLUE, Oracle, TurboLinux, Neonagy, Caldera, SuSE Mitsubishi Electric Corp., Digital Design, DigitalFactory, and Japan Linux Association.

# freeStandards.org

Home of The Free Standards Group



## RiscOS Computer Systems

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- Web Wizard includes Oregano, External 56k modem,			
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RiscPC233T 8M, 2GHD, RO3.70	£1015	£1105	£880
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Riscstation R7500 Lite 16Mb, 4GbHD, 48CD, 10BaseT	£721	£811	£586
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Acorn Sprinter NC 16MB, 10BaseT with Mse/Keybd	£485	£575	£350

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- A SIX port 10BaseT Hub for networking to each computer<sup>2</sup>.
- TWO analogue telephone ports for standard telephones, faxes & modems.
- DHCP Server for automatically configuring computers for the network.
- Built-In Telnet server for configuration & diagnostics<sup>1</sup>.
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Ring now for further information.

<sup>1</sup> - ISDN line and ISP account not included. <sup>2</sup> - Each connected computer must be equipped with a 10BaseT network card. NOTE - PSU, Network cabling for ONE computer and ISDN Cabling is included with the unit.

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Following prices strictly whilst stocks last.

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------	------	------	------

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1Mb 2nd user	£20a	2Mb	£79a
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Call for details of memory for other models.

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Carriage: a=£3, b=£8, c=£10

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------------------	-------

Call for other HD sizes

10,000rpm Cheetah drives useful for VideoDisk	
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## Simtek IDE Interface

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---------------------	------

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---------------------	------

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## Add £55 for External Drive

A suitable cable will be required for ext units.

## 13 Networking (Carr. £7)

All cards are 10BaseT only for Compaq add £10

A30X0 EtherLan 101	£110
--------------------	------

Archi EtherLan 511A+	£110
----------------------	------

RPC/A7k EtherLan 601	£110
----------------------	------

All ethernet cards include Acorn Access+.

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-----------------------	-----

3Com 56k Voice Modem	£85
----------------------	-----

3Com 56k Message	£100
------------------	------

D-Link ISDN2 Router	£220
---------------------	------

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ANT Internet Suite II	£116a
-----------------------	-------

9-25 Archi or PC Wired Modem Cable £12ea &amp; 3-way Serial T-Switch (incl. comm. cable) £32b

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-------------------------	------

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----------------------------	-----

Logitech Mouse (Acorn)	£20a
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## CD-ROM Software

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Hutchinsons Encyclopedia 92 for RISC OS	£22a
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Hutchinsons Encyclopedia 97 for PC only	£5a
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## Games (Carriage £3)

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Gods (Krisalis)	£5a
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Holed Out Compendium (4D)	£5a
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Last Ninja	£5a
<tbl\_info cols

# Toastining CDs

An essential toy in any computer enthusiast's toolkit is a CD Writer or Re-Writer. They have a multitude of uses, from compiling your own arrangement of tracks from your audio CDs (not that it's legal) to creating CDs of the latest Linux distribution. Linux users have traditionally had to use cryptic, command-line based tools, such as *cdrecord*, to write CDs. The Gnome *Toaster* is an application which attempts to provide a user-friendly interface to CD Writing, much like Adaptec's *Easy CD Creator* software for Windows.

## Installation

Gnome *Toaster* is only a front-end to the older CD tools under Linux therefore you will need at least the following programs installed on your system: *cdrecord*, *cparanoia* and *mkisofs*. Also you will need at least the GTK libraries installed and properly set up plus (optionally) the Gnome desktop environment. Mandrake have an excellent animated tutorial for setting up CD Writers on their Web site ([www.linux-mandrake.com/en/demos/Tutorial/](http://www.linux-mandrake.com/en/demos/Tutorial/)).

The software is available for download from [gnometoaster.rulez.org](http://gnometoaster.rulez.org) in both source code form and the RPM format, which allows for easy installation on RedHat and similar distributions. If you download the RPM, installation is easy; just change to the directory containing the RPM file and (as root) type the following command:

```
rpm -Uvh gtoaster-<version>.rpm
```

replacing <version> with the correct version in the file name. Compilation from the source file is almost as easy. It follows the standard GNU style install of unpacking the compressed file and typing as root:

```
./configure && make && make install
```

The documentation available on the Web site or for download is excellent (if a little incomplete). It includes

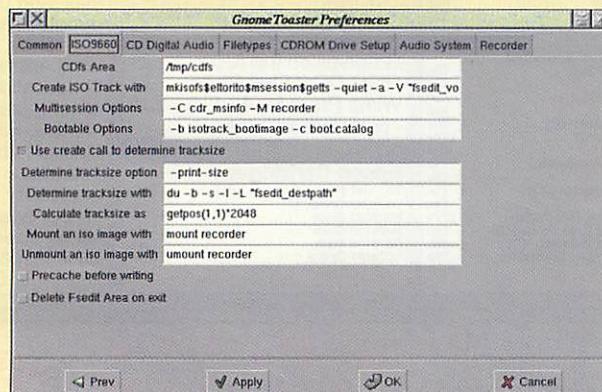
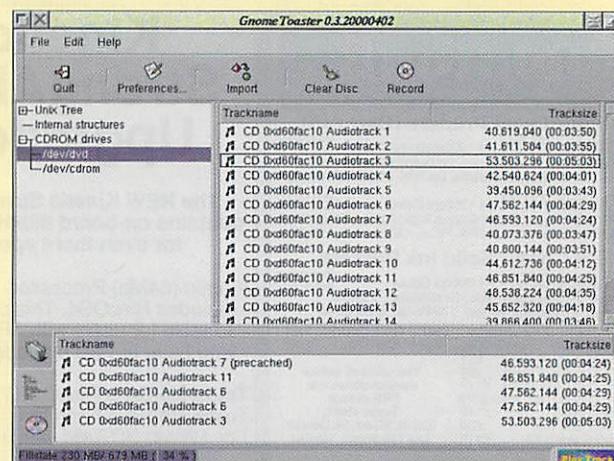


Figure I: The Toaster's preferences are comprehensive if a little obscure



Choosing your files to create the image

a brief description of CD writing under Linux and a good description of how to use Gnome *Toaster* to perform basic tasks.

CD Writing is one area of computing where it pays to read the documentation first, lest you ruin one of your writable CDs. In the case of Gnome *Toaster*, the documentation helpfully suggests that you set the 'Dummy Write' option the first few times so you can get used to the software without wasting CDs.

The documentation also includes a very useful section on setting up the software. The preferences dialog is full of options as shown in Figure I. Rather confusingly you have to actually specify the numbers the computer uses internally to find the CD Writer (the SCSI ID). You can find these numbers by typing:

```
cdrecord -scanbus
```

in a terminal and noting the numbers of the form 'X,X,X' next to your CD drive. It wouldn't take much for Gnome *Toaster* to take a similar approach as other CD writing packages (such as *XRoast*) and using *cdrecord* like this to provide you with a drop-down menu of drives to choose from.

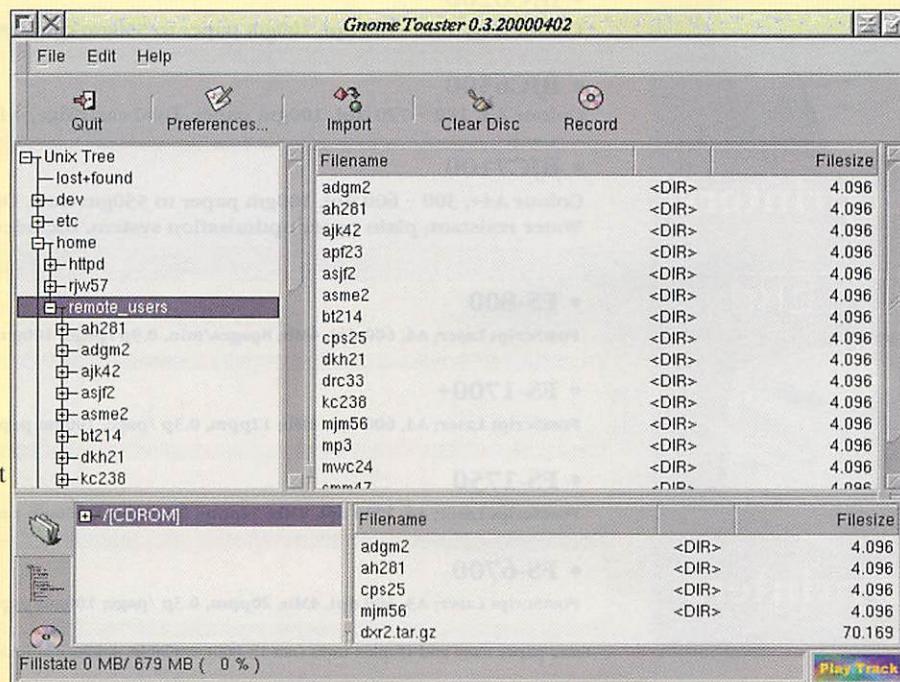
## Using it

The main Gnome *Toaster* window is shown in Figure II. It consists of two main areas, the upper, file manager-like, area which can be used to select the file(s) to add to a CD and the bottom CD layout view which shows what will be on your CD. Writing files to a CD is as simple as dragging them from the file list at the top to the area at the base.

Indeed you can drag files directly from the Gnome file manager in a similar manner to the RISC OS Filer (a long overdue feature of other operating systems). A nice touch is the ability to 'pre-cache' files meaning that



Figure III: Using the Toaster to backup data files



Gnome *Toaster* reads them and adds them to a temporary directory so that they are all prepared for writing to CD instead of having to wait for them to be copied during the writing process.

A simple CD layout used to back up the contents of the home directories of the users on my machine is shown in Figure III. The ability to copy entire directories makes Gnome *Toaster* an ideal choice for making backups.

There are three tabs in the lower area of the window. They allow you to edit the contents of the disc, the tracks on it and the recording process respectively. In most cases you will want to drag files onto the pane represented by the directory icon and then just start the recording by hitting the 'Record' toolbar button.

You can also record audio tracks directly off an Audio CD by just popping the CD into the drive and opening the 'CDROM drives' folder. The audio tracks can then be dragged onto the track editor window (obtained by clicking on the middle tab). At this point you can select tracks and preview them by using the 'Play Track' option.

A good feature of Gnome *Toaster* is its ability to treat both MP3 and Windows WAV files as audio tracks. This makes it easy to combine legal MP3s (available from [www.mp3.com](http://www.mp3.com)) and audio tracks onto one CD. This feature alone makes Gnome *Toaster* a powerful audio CD creation program but coupled with the ability to use any other programs you have which are capable of converting other file formats transparently and Gnome *Toaster* becomes an almost indispensable tool for audio CD creation.

Finally Gnome *Toaster* can handle so-called 'ISO images'. These are 'snapshots' of the contents of a CD collected up into one file. They can also include information for allowing the CD to be bootable (can run without any other OS installed) on PC hardware. Many Linux distributions are available for download as ISO images offering the advantage that one large file is often quicker to download than several smaller ones.

Writing an ISO image is as simple as writing an audio track. Simply delete the internal Gnome *Toaster* ISO filesystem track in the track editor then drag and

drop the ISO image to the track editor.

The progress dialog is good, showing estimated time and progress through the current track and overall job. One thing that it lacked was a 'Cancel' button. Although cancelling a CD write could render the CD unusable, it is sometimes desired and would have been a simple feature to implement.

## Conclusions

All in all Gnome *Toaster* is a well-written, easy to use interface for CD writing under Linux. The difference between the track editor and directory layout view is not immediately apparent and the icon for the track editor does not really suggest its purpose but aside from these niggles the software is remarkably easy to use.

For the creation of Audio CDs, Gnome *Toaster* surpasses many pieces of commercial software. The ability to mix MP3s with audio CD tracks, as well as combining tracks from different Audio CDs provides almost all the control you would want. The bar at the bottom of the window showing the amount of room left on the CD is also a nice touch.

For data CDs the interface is less mature. On my system the bar showing amount of data left on the disk didn't work at all and the pre-caching seemed to take a long time but the interface is fine for simple backups.

The Recording panel is well laid out but could do with a few improvements. It is fine for getting the job done but simple touches like greying out the 'Wipe CD-RW' button when the CD in the drive isn't a RW would greatly add to it.

For a program under continual development, Gnome *Toaster* is quite complete and apparently very stable. Its excellent audio facilities and adequate data CD capabilities coupled with its (relatively) easy setup makes it one of the best pieces of CD Writing software available for Linux.



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**ARMLinux!**

Aleph One Limited

Aleph One is now shipping the first edition of Aleph ARMLinux for use on Risc PCs. It is based on Red Hat Linux and has limited documentation. At £10 inc VAT and post it does not include support except by email.

We can also provide a new Hard Disc of at least 10GB with Bootable Aleph ARMLinux already installed, and with space for your RISCOS and PC work too. RISCOS 4 and the necessary drive reformatting are available at the same time.

A number of options are involved; details are on our Web pages at:

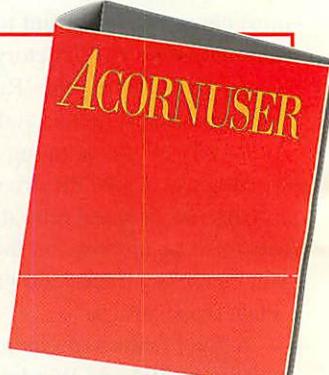
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# Railroad Tycoon

There are two main genres on games which prove popular. The 'shoot-em-up' and the rather more sedate (yet still rewarding) simulation. *Railroad Tycoon* belongs to the latter category and like *Rollercoaster Tycoon* placed you in control of a theme-park and allowed you to construct some big big dippers, *Railroad Tycoon* allows you to build, well, some big railroads.

Installation can be a bit of a sore point under Linux. Since the OS is so flexible, many users have wildly differing setups. Loki have risen to the challenge and provided an excellent installation program. On my (very) customised Mandrake 7.0 machine, installation was just a case of mounting the CD and typing

```
sh setup.sh
```

You are the Managing Director of a fledgling railroad company and your aim is to beat competition and make your company one of the best, fastest and largest companies around.

Most gameplay takes place on a 3D representation of the terrain. A nice touch is that the maps are all based on real places and have some historical background to them. One nice map starts in wartime Britain (and yes the map is the entirety of Britain).

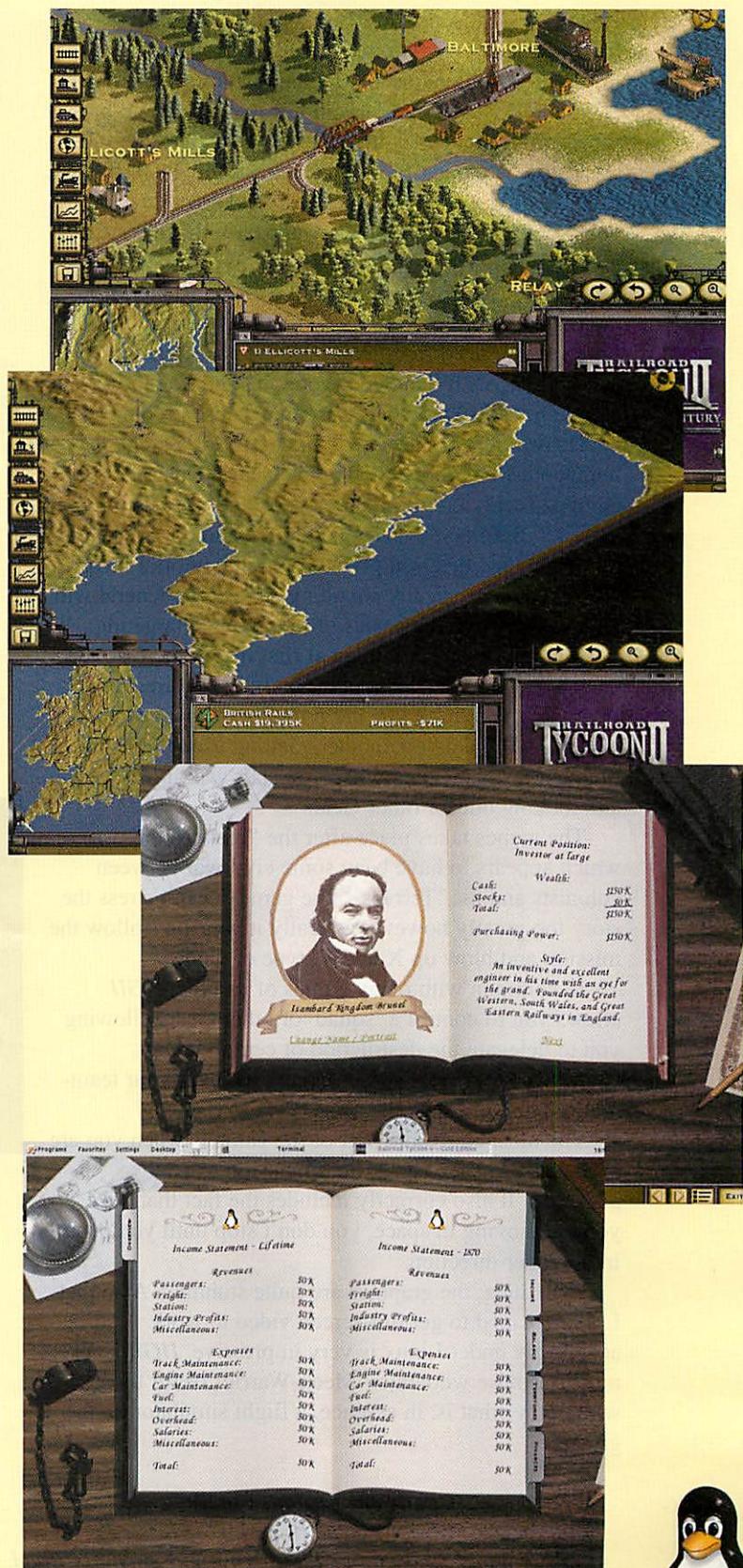
The game allows you to lay rail to connect cities and place stations (with all manner of extras) along the track. The main aim is to get goods from the producing centres to the manufacturing towns that want them.

An unusual feature of the game is the stress on actually having to run the company. You can buy or sell your stocks, consult detailed statistics on your company and you are even presented with an Annual report at the end of the year. Combined with the nice 19th century feel of the graphics this lets you really feel the part.

There seems little room for a large amount of creativity in this game. In other simulations, you could place unique features in your scenario. For example, landmarks in *Sim City 3000* and the rollercoaster creator in *Rollercoaster Tycoon*. *Railroad Tycoon* lacks anything which really makes one person's game look different to another.

Another down-side is that, in common with many simulation games, it takes a long time to get to grips with the way you are expected to act. However, once the basics are mastered, it becomes an enjoyable game.

If you are a fan of simulations, *Rollercoaster Tycoon* gives you great control over how the business is run, your finances and also gives you some feel of what it is actually like to run a company. If you play simulations for the fun of seeing things you create, getting ridden on or lived in you may find *Rollercoaster Tycoon* a little dull.



# Heavy Gear II

Heavy Gear II is at a disadvantage from the start as 3D hardware support is limited under Linux. This is improving with major board manufacturers such as NVidia releasing Linux drivers for their hardware but for fast 3D Windows still, unfortunately, rules the roost.

Having said that *HGII* does remarkably well. It is the first (so Loki claim) example of a PC Direct3D game being ported to OpenGL. They appear to have done a good job too.

Installation is a snap due to the Loki installer. It just asks a few questions and away you go. It installs all the libraries you need to use your 3D card so no messing about required. It handled a Voodoo2 and Voodoo3 well although lesser known hardware may cause problems.

Heavy Gear II places you in control of a giant humanoid-like robot called your 'Gear'. This robot is equipped with a myriad of weapons and propulsion systems. Before you start playing the game it is strongly recommended that you play through the tutorial levels where a stereotypically sounding American General will take you through the basics of moving and targeting.

Moving is a little strange at first due to the fact your Gear's legs and head can point in different directions. Invariably you think you are pointing one way whereas walking will take you another. Getting used to this takes time but is appreciated when you start walking around and looking out for other Gears.

The game takes place after the 'Terra Nova' war which appears to have been some civil war between colonists and the 'Terrans'. The game doesn't stress the story too greatly however as really it is just a 'follow the mission and blow up X and Y' type of game.

In common with many games of its type, *HGII* allows you to control a 'squad' of other Gears allowing you to delegate the destruction of certain targets. Generally you find yourself having to cover your team-mates' backs most of the time.

The most enjoyable part of the game is when you are in Space. This adds an extra dimension to your problems. It also correctly includes the fact that once you are moving in space, you don't stop until you push in the other direction.

For Linux, the graphics are quite stunning. Also that Loki managed to get full-screen video to work acceptably under Linux is very impressive. *HGII* is a must for those who enjoy Mech-Warrior or for those who fancy what is, in essence, a flight simulator on the ground.



**Product:** Railroad Tycoon, £34.99  
**and:** Heavy Gear II, £24.99  
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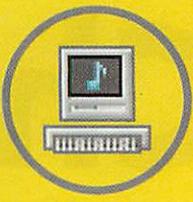
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# AUCD10

## preview

*Paul Johnson on what's coming for the August issue*

**N**ext issue sees the 10th *Acorn User* cover CD, and like the other discs so far, this one is themed – well, that's not quite true, it has two themes: games and the Internet.

### Games galore!

This has been something I've wanted to do for a fair amount of time now – get together some of the finest of the old Acorn games from the likes of Minerva, Krisalis and Gremlin and put them onto one CD. Mix that together with the best of what the PD scene has to offer and what we have is a disc which you'll use for a long time to come.

Hold on though.

Given that these old games are just that – old – they won't run on the newer machines (remember, when these companies either went dormant or left the scene, we just

about had the A3020 and A4000 machines – which takes me back). Back then, everything was RISC OS 3.1 using either the ARM 3 or ARM 250 processors. Fortunately, a bunch of talented individuals have created patches for

these games to work right up to RISC OS 4.03, so march on *Lemmings* – here we come. Yippee!

From the PD scene, we've the latest versions of *Angband* (a role playing game), *Overcast* (which has only just been released at the time of writing this article), the games from [ftp.gmd.de](http://ftp.gmd.de) (text-based adventures), an entire section given over to adventure games, emulator software and the entire BBC Lives archive (as it currently stands).

### Hook up now!

The second theme is the Internet. Included are all the software you will need to get online with, including the log-in scripts for RedHotAnt and UKOnline as well as setting up instructions.

Added together with discount offers from Warm Silence Software, R-Comp and Argonet, the net value of the CD all told exceeds £200!



*Oh no! Everyone loves Lemmings*

### Survey time

The next CD also sees the release of the latest *Acorn User* survey in which we find out just what sort of system you have, and what you would like. Unsurprisingly the options for new machines look quite different this year – there's just so much to choose from – and we're taking a closer look at just what you use the Internet for, in all its different incarnations.

Not only that but we've included some more general questions about you and technology as a whole. With the future of the RISC OS market never having looked so good we really want to get to know you and your interests.

So make sure you help to push *Acorn User* in the direction you want it to go by filling in the survey on next month's CD and returning the file to us by post on disc or by e-mail.

# Walking along

**G**eoff Titmuss has been around a long time in the RISC OS market, the story goes that he created the original *Textease* word

processor/DTP program because his wife found all the existing programs to be too complicated. But there's a lot more to it than that because Geoff, though he is very modest, is one hell of a programmer.

It was his day job before and he used modern program design techniques (the Booch method, now refined and expanded into UML) to write *Textease* – he did what all student programmers are told (and almost never do) – he designed the program first, on paper. Then he created the code. And this is the reason why, through all its expansions and enhancements, *Textease* has continued to have a consistent, comprehensive but comprehensible user interface.

And which is why, to a

knowledgeable programmer, *Textease* is a work of art; to the national award judges it has a habit of winning; and to the user it's simply easy to use.

After starting on RISC OS systems it was inevitable (and good business sense) for the software to be converted to PC and Apple Mac – but one of the crucial design features (and something lost on PC companies who also do Mac conversions) was total compatibility between versions, and Geoff has never failed to continue his support for RISC OS. But then, as he's such a good programmer and has such a good team working with him, he avoids re-inventing the wheel and the core code that forms the RISC OS version is the same as the core

code that produces the PC version and, of course, the Mac version.

So when I learned that *Textease* was about to be joined by a spreadsheet and database I was excited which, for someone as cynical about this market as I am, really does mean something. And I haven't been disappointed.

Now, strictly speaking, *Textease* is aimed fair and square at the education market so this review is applicable to that but we're reviewing it also just as a general purpose spreadsheet because it's easy to use and if you want to do a printed presentation with lots of spreadsheets and charts, the *Textease* spreadsheet (*TeTable*) has some surprises that might just interest you.

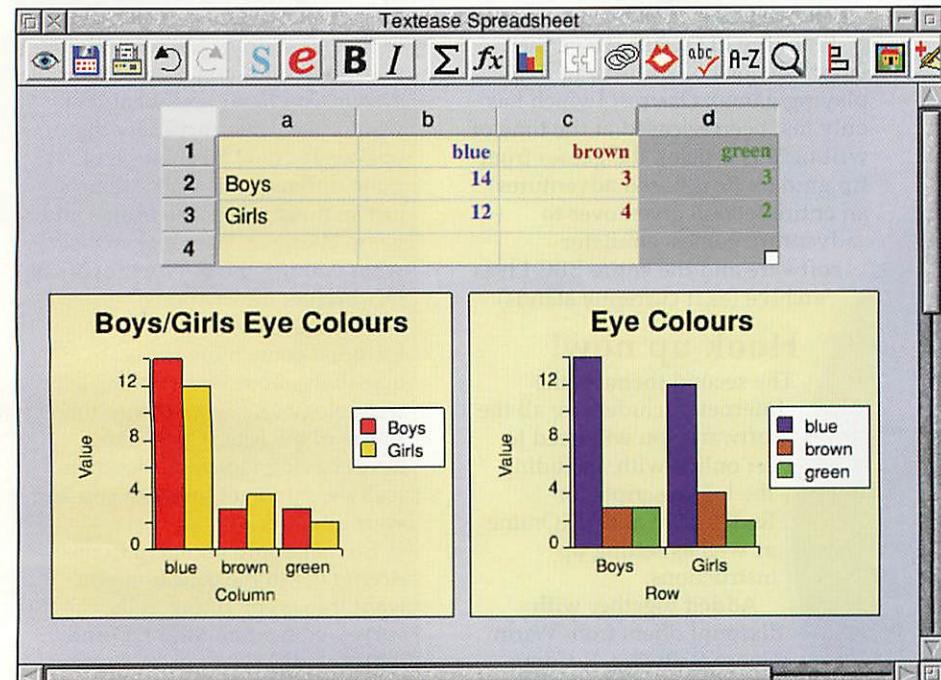
Enough of the preamble, let's get down to the nitty-gritty.

## The package

As befits a professional package you get a nicely designed, shrink-wrapped box inside which is another box and inside that is a manual, a master licence and the CD-Rom containing the software versions. All three versions are provided on one CD, although the Mac version isn't ready yet, so we got two.

I slipped the CD-Rom in the drive and clicked, then double-clicked on the *!AcornRun* icon, which simply opened another directory containing the install program. Running this gave me the option of installing either *Textease* with the spreadsheet or *TeView* which is a standalone *Textease* viewer application.

I opted for *Textease* and was honoured with another directory opening and no further



Using the *Textease* spreadsheet in standalone mode, the charts are actively linked to the data

# easy sheet

instructions – perhaps some time could have been spent on the Install interface, Geoff? Anyway, I dragged the contents of this directory (*!ClipArt, !Textease and !TeTable*).

This is where the master licence comes in, the top half contains a serial number and a key and is your proof of ownership, the bottom half contains the serial number but not the key. You fill in the bottom half and send it back (postage paid) to Softease after which you will have access to their free support and upgrades.

The support line is on their usual phone number so you're not paying premium rates and the support is actually free – which probably has the PC and Mac people falling over in amazement. But let's face it, RISC OS software (particularly when it's this good) doesn't need a lot of support.

Running either *Textease* or *TeTable* for the first time requests the Master licence information and a name to register the software. I made the mistake of putting in the serial number for the Windows version of *Textease*, the program explained my mistake and allowed me to change my mind. Once you've set the Master licence you don't have to enter it for the other programs in the suite.

If you don't have a serial number and key you can still run the programs as demo versions which is quite a handy way of ensuring any pirated copies act as promotion for the real thing.

## Unique software

I was planning to take everything in an orderly fashion and sort of slide

the unique feature of the spreadsheet by you to see if you noticed but I'm just too excited about it.

Okay, in any normal spreadsheet you have one spreadsheet, yes? Did that make sense? No? Let me put it another way, if you run *Eureka, Isis* or *Schema* and click on the iconbar icon you get a spreadsheet, each document is one spreadsheet.

Well, in *TeTable* it isn't. Each document can hold one or more spreadsheets, in fact you can delete all the spreadsheets out of a document and have none. Obviously when you click the iconbar icon it brings up a document with a spreadsheet in it, but the spreadsheet is an object in the document, not the document itself.

So far so good, that means that you can create a document containing many smaller spreadsheets. Is this good – particularly? Yes because I haven't mentioned the fact that you don't just have to write in the spreadsheet, you can have text and pictures outside of any single sheet on the document, so the spreadsheets are simply objects along with all the other types of object you might find in a DTPed document. Thus you can start writing your report and embed the spreadsheets as you go along – charts are utter simplicity, select the area of the sheet to be turned into a chart, click the chart button and it appears, just another object in the document so once it's there you can just move it to the place you want and it forms an integral part of the document.

And the things you can do with charts are just mind-blowing in their simplicity and power, but I will control myself and return you now to your scheduled review sequence, with a look at the manual.

As with the *Textease* manual this one is very simply laid out as an A5, spiral-bound, flip chart of some 50 pages. It covers the ground fairly clearly, in fact I gave it a read through before I started and found it quite easy to follow even without the software running in front of me.

There are a couple of glaring mistakes which really are to be avoided especially when aiming at teachers (one of them is utterly gross: "manor" for "manner"; methinks someone misspelt "manner" and then accepted a spelling checker's correction without thinking).

But apart from that the only other problem is the change of typeface size/aspect ratio at various places which is irritating but not fatal. The proud statement that the manual was produced with *Textease* tends to lose some of its power when this type of thing is evident.

## Just do it

One of the key features of *Textease* and now *TeTable* is instantaneous effect, when you make a change in a dialogue box it is immediately reflected on-screen. This gives you the instantaneous "just do it" feel that you don't get with any other program. Examples are probably the best way to demonstrate this:

- Open a document and delete the existing spreadsheet to make some space; click Menu, select Table->Create; point to a place on the

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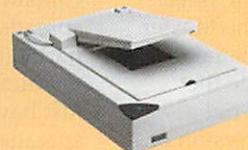
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screen and start to drag out a rectangle (as instructed in the help/status line); suddenly you are dynamically creating a table, the longer you make it, the more rows there are, the wider the more columns; shrink it and the rows or columns dynamically reduce. No clumsy dialogue boxes to fill in with numbers.

- Using your new small spreadsheet, click on the clip-art icon and up pops the clip-art directory, drag a graphic (a star, for example) on to the backdrop; there it is. Now drag it around a bit, what you drag is the actual graphic itself not a box; drag it into a spreadsheet cell; and in it goes, automatically resizing the cell; drag it to another cell – it moves; drag it out to the backdrop again; and it's out. No messing, it just *does* it.

- Drag columns wider or narrower, drag rows taller and shorter; delete a row or column by selecting it and pressing Delete; Adding rows and columns is *slightly* less intuitive – Control+Return for the former, Control+Tab for the latter.

- Text in a cell autowraps, you just type until you've finished.

- Want to change the styling of some text in a cell, group of cells (or on the backdrop)? Select what you want and click the 'e' (for effects) button, and any option you click takes instant effect

## Cells and data

Once again, unlike most spreadsheets, cell editing is not done in a separate panel: when editing the cell, you edit the cell, a definite pluspoint in the education area and not a problem for anyone else.

Click in the cell and then start typing. Numbers and text are automatically distinguished and if there is any confusion you can add quote marks round a number that is supposed to be treated as text. Text

is left aligned by default, number right-aligned.

Formulae are added by clicking on the fx icon which pops up a window with a text entry area, the more obvious operations and a pop-up menu for the formulae, which are shown with their parameters. At this point the method of data entry takes a sharp left turn from what is normally expected in a spreadsheet, or even on RISC OS and some people aren't going to like it.

In normal spreadsheets, when you have a cell selected and click another cell the reference for the new cell is placed in the formula something like this "+A1", unless you've already typed in an operator, or it's the first item.

*TeTable* also does this, sort of. The confusion arises because of the need to have the program work similarly to the PC and Mac versions. Both of these systems allow text in writable icons to be highlighted and, if a key is pressed, the highlighted area is deleted and the new character is inserted. So far so good.

What happens is that when you click in another cell, that cell's reference is entered into the formula area but without an automatic operator, and it is highlighted. If you then click in another area, or type in an operator *without* removing the highlight, you lose the previous item and have just the new one. Highlighted.

How this works with formulae makes more sense because when a formula is selected from the menu it is automatically appended (or replaces a highlighted item) however instead of being completely highlighted itself, only its parameters are

highlighted, which means you can just start typing or clicking to replace the parameter area.

There is a certain amount of intelligence built into the input system, for example if the highlighted parameter is the word "range" then you can select a range of cells – but not if it isn't. Likewise if the word is "value" only a single cell will be selected.

Apart from the formulae the style of the cells can be changed using the 'e' (for effects) icon, this pops up the text effect dialogue which allows you to alter:

- the typeface – select face, size, weight, aspect ratio and underlining;
- spacing – column width, text indent, justification, tab size, line and paragraph gaps;
- text colour and background colour for anti-aliasing;
- speech options – the voice to use from twenty options, volume, speed and colour to highlight text;
- formula display options – currency symbol, use of percentage, thousands separator, bracketed or red negatives, decimal places, vertical and horizontal justification, fill colour, switch off the row/column labels or just don't print the row/column labels.

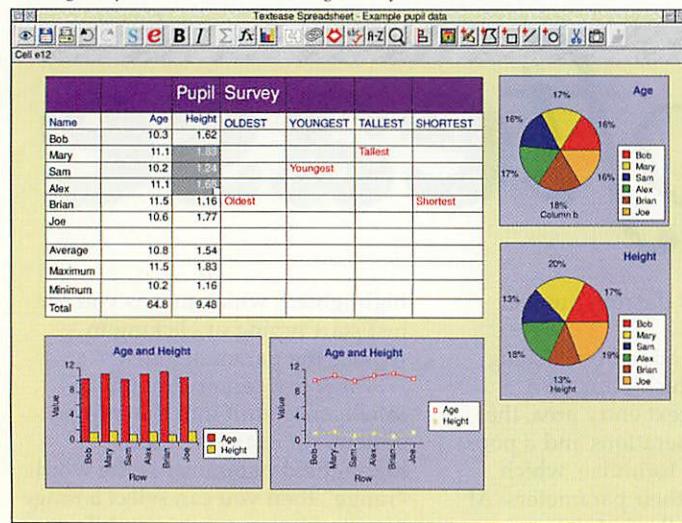
And remember that even the speech options can be set individually for each cell or a group of cells.

## Manipulating charts

I have restrained my enthusiasm for the charts long enough, so here comes the whole works. It is not particularly surprising that *TeTable* charts are interactive, the concept of charts that update automatically when the data changes is not new

# textease®

Running the spreadsheets and charts straight out of *Textease* with all its tools



and it is implemented but charts go so much further than that.

If you're looking for twenty different types of chart, this is the wrong place to look, you get four: Histogram (bar), pie, line and scatter. You don't get them in 3D but you can explode a pie chart by simply dragging a segment out when it's been plotted.

In fact the Charts typify the whole *Textease* philosophy for doing the obvious: In most spreadsheets or charting applications you would have to tell the software which segment you wanted exploding in advance. With *Textease* you just explode the one you want when you see the chart.

This goes even further, let's say the program has automatically scaled the graphs but not the way you want, how do you change it? Once again most applications have options in the chart-creation dialogue box to set this up, *Textease* doesn't. If you want to change the scale, you just change the scale on the chart, and *Textease* redraws it to the new scale.

You can alter the minimum value or the maximum value and altering one of the values in between changes the increments. Plus all the labels are completely editable as are the bar colours – if there are several sets of values on one bar chart, for example, changing a single bar colour will alter all the ones in the same set of data.

Back on the spreadsheet, as

you're editing a graph the data sets themselves become highlighted to show which are the active ones for the current graph. And finally if you copy a chart (Control+Drag, as for any other object) both will be actively linked

to the data.

## Saving

The manual is useful but the fact remains that it does not cover everything, it's a user guide not a reference and the information on saving is brief: two paragraphs each on a separate page.

As you might expect you can save the *Textease* document just as a document, nothing special there but you can also save it as special text definition (in a similar way to *Impression's* DDF) of the document. Then there's the save as text option, the save as Drawfile, save as a special text drawfile, the expected save as CSV and, finally, the save as HTML.

The CSV feature is important for any spreadsheet type program but differs slightly for *Textease*, simply because it can have more than one actual sheet in each document. Only the selected sheets are saved in the CSV file, with blank lines between to distinguish them.

It's a testament to how the *Textease* software is designed that adding new object types, like a spreadsheet, requires the minimum of work to add it to the HTML saving line-up. *Textease* could do it, therefore so can *Textease*. So what else have we got? Well there's the infinite undo-redo, so you can step through the whole creation process backwards and forwards.

And I haven't gone into the other types of object that can be dropped

into *Textease* either the backdrop or into cells: BMP files, Windows Meta files (WMF), JPEGs, GIFs, sprites and drawfiles; but it doesn't just stop at stationary graphics you can also have AVI video files and WAV sound files.

The version reviewed was not utterly bug-free, there were problems with the cell-clicking for formulae, and the HTML saving was apparently not working absolutely correctly – not that I could find a problem. Fixes for all known bugs were promised by the end of the week I was reviewing it, which was before the Wakefield Show, about three weeks ago as you read this.

Okay, so that's *Textease* apart from the bits I've almost certainly missed but then we must move over to *Textease* itself because although *Textease* has a lot of options it doesn't have the full capabilities for writing and creating graphics on the backdrop that *Textease* has.

*Textease* is a multi-page full DTP product and when you've installed the latest version with *Textease* the facilities of *Textease* are added to by the ability to drop in spreadsheets wherever you feel like it in the document with all the features available in *Textease*. It's almost frightening in its simplicity and the addition of the forthcoming integrated database will make it awesome.

I don't think I'm exaggerating when I say that the *Textease* suite is one of the most powerful – and yet simplest – software tools in any computer market today.

END

## Product details

Product:	<i>Textease</i> Spreadsheet (requires <i>Textease</i> 2000)
Price:	£39 plus VAT, single user (£10 per extra licence)
Product:	<i>Textease</i> Studio (inc Database)
Price:	£149 plus VAT, single user (£25 per extra licence)
Supplier:	SoftEase Ltd, Market Place, Ashbourne, Derbyshire DE6 1ES
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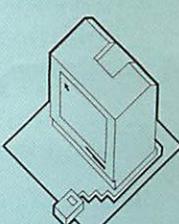
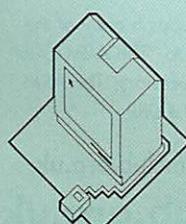
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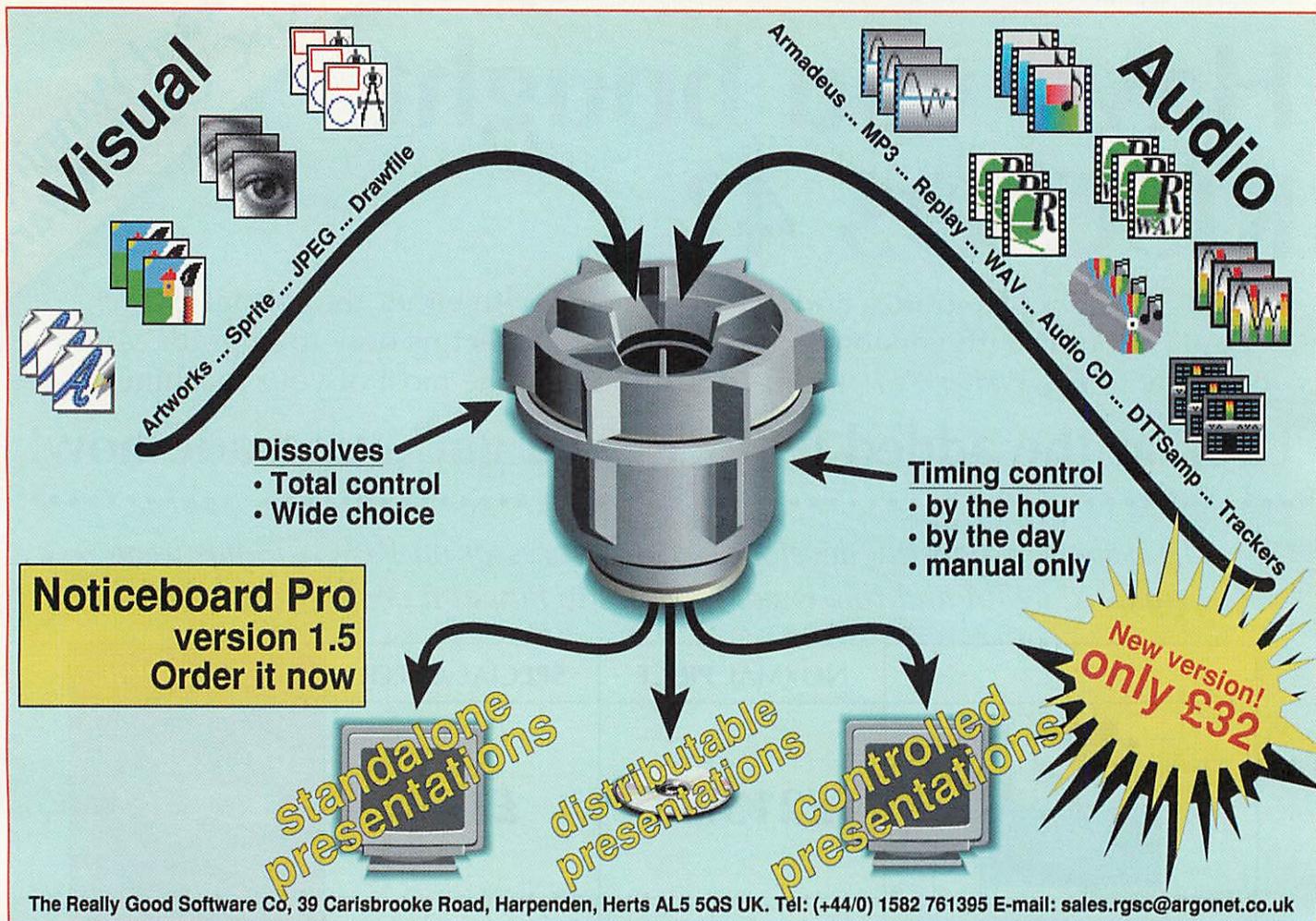


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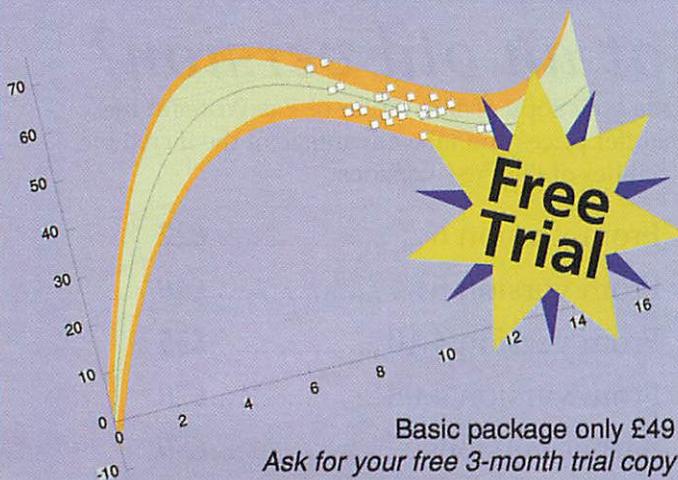
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Tel: 07010 709 829 Web: [www.armclub.org.uk](http://www.armclub.org.uk)

Email: [chairman@armclub.org.uk](mailto:chairman@armclub.org.uk)

# Riscstation go soft

*Teri Paul looks at some hardware-dependent software*

**P**ossibly one of the most innovative of the new RISC OS-based machines has to be the RiscStation machines. While I'm doing a wholesale review of the hardware, I am going to focus on two of the best parts of the machine, namely the sound system and DDC control chip and the software in front of them.

In the past, Mike Cook has been showing (amongst other things) how to use the IIC and additional bits to act as thermometer. Very nice it is as well and the RiscStation machines have that onboard.

The same hardware is responsible for looking after the internal fuses and power lines to such things as the cooler fan, joystick interface, ethernet interface, keyboard and mouse.

This DDC chip, through the associated software (*RS-HWC*) is already set up for that particular machine and hardware configuration (this is performed at RiscStation) and unless something goes wrong (such

as the machine going over the configured temperature maximum or a fuse blowing), you don't notice that it's even there.

While all computers worth their salt have fuses, the RiscStation ones are thermal, the upshot is that if you turn the machine off for ten minutes, power back up and you're away – no large repair bills.

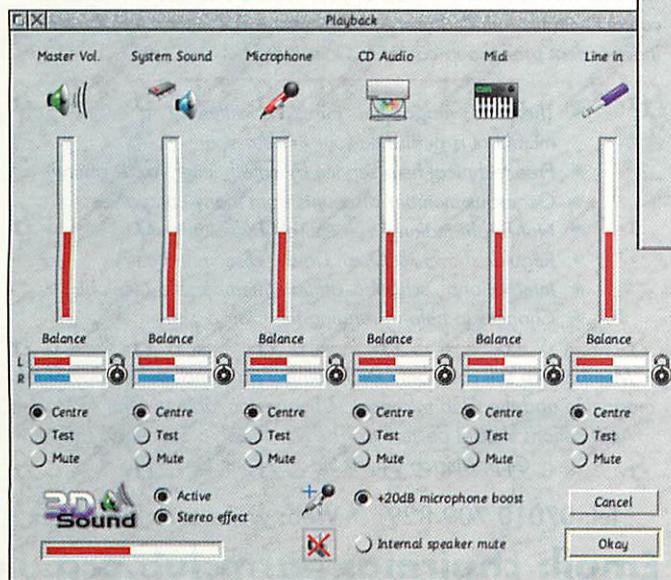
The sound software is the best I've seen since playing around on the old Atari ST machines back at the start of the last decade. You can control every facet of both output and input and, in combination with the Yamaha wavetable card, the results are awesome.

While the version of the software I've seen running is in its early beta stage (for

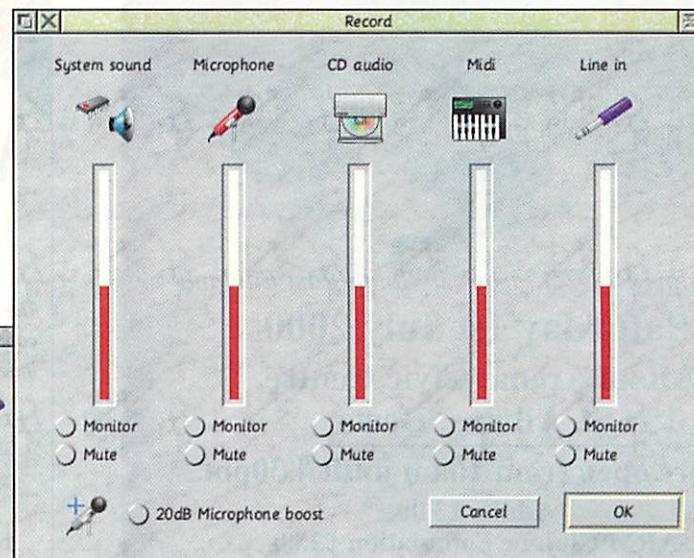
internal use only), the screenshots here show what to expect.

Don't expect though to see a version running on your Risc PC or Mico, this software will only work on RiscStation machines, and as you would expect, the software is to be supplied free with all machines or for those of you already using the RiscStation computers, as a free upgrade.

I have been told from Roy Heslop that the *RS-HWC* software is almost ready to ship with the audio software available for a couple of weeks past Wakefield.



The sound input and output control windows



## Stop Press!

Shortly after finishing this article, RiscStation have contacted me to say that they have a sound sampler on its way to make further use of the audio system in their machines. There is no firm date for the release yet, but the software will create Replay files or raw files in real time. Watch this space!

# Free Ads

• Risc PC 600: 8MB +1MB RAM, 400MB IDE HD, ARM 610 Processor Card, PC Card, CD ROM, Acorn AFK60 Monitor. All for £270 or offers. Call Jim on (01572) 737 699 (Evenings) (Rutland, East Midlands).

• RPC700 13MB HD830 £200. A7000 8MB HD540 Fan £150. A5000 4MB HD170 £80. A4000 2MB HD80 £50. Taxan 770 £20. Also A540, A440/1/Arm3, A3000 plus accessories/software. Call/email for details mike@mhobbs.demon.co.uk 07710-348205 (Cambridge).

• Risc PC 700 with SA, 17Mb RAM, 1Mb VRAM, 1.2Gb Hard Drive, CD-ROM, Internal modem, Freeserve Internet package, MIDI card, Dumb keyboard, hand-held scanner and computer trolley. £650 ono. (Norwich) Fiona King, tel:

01953 605834 or e-mail: [feeee@hohs.freeserve.co.uk](mailto:feeee@hohs.freeserve.co.uk)

• Wanted: A Risc PC ethernet card – any type considered! Duncan: [dfm@aberfeldy.dcs.st-and.ac.uk](mailto:dfm@aberfeldy.dcs.st-and.ac.uk)

• A5000 for sale with CD driver, hand scanner, Canon Laser Printer, Impression Publisher, Artworks, loads of other software and games. Two A5000s available. Simon Quail 01403 822766 (evenings).

• FREE: Vol 10 issue 7, ACORN User Mags from Vol 1 issue 1 to Vol 12 issue 10, all in good nick and free to anyone who wants to take them away. South Ealing London. E-mail: [colin.cant@talk21.com](mailto:colin.cant@talk21.com)

• RPC700, 32Mb, DX4-100 PC card, HD425, CD-ROM, AFK60, RISCOS 3.6, manuals, software and magazines. £250

ono. Tel G. Tyler: 0118 3778033 (Wokingham).

• Acorn Archimedes A3000, hard disc, upgraded. Impression, Datapower, Schema software, manuals, games, and much more. £250 o.n.o. Tel/Fax: 01242 512306

• WANTED: ARM 710, 7500 or StrongARM processor, at least 1 MB VRAM, different software. It must be possible to send it to Germany. Tel: 049 6721 922067 or e-mail: [sg24bike@aol.com](mailto:sg24bike@aol.com)

• Acorn A4 laptop, 4MB RAM, 60MB HD, battery pack, leads and manuals. £400. including postage. Tel 01706 812516 or e-mail [loujrz@ukgateway.net](mailto:loujrz@ukgateway.net)

• 1MB VRAM for Risc PC, best offer secures. Call Paul on 0207 202 3309 or e-mail [paul\\_jagger@uk.ibm.com](mailto:paul_jagger@uk.ibm.com)

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# On the road

According to a recent report from the Department for Education and Employment, children in the not-too-distant future can expect to learn from experts beamed into their classrooms. Entitled "Classroom of the Future" the report was compiled after a series of nationwide roadshows encouraged teachers to rethink the way they work and consider the possibilities for learning and technology.

The Government have promised £1.7 billion in new technology for schools with the aim of creating futuristic classrooms. Michael Wills, Minister for Learning and Technology, said: "Computers are a potent teaching tool,

but they will not replace teachers or the need to learn the basic skills of literacy and numeracy. However, computers can free teachers to what they do best - teach, and can enhance the learning experience of both pupils and teachers."

Where do we stand now? Statistics show that 93 per cent of secondary schools and 62 per cent of primary schools are now connected to the Internet.

While these are reasonable percentages it smacks of the old problem of the original 1980's personal computer buying for schools: Never mind the applications, just get the hardware in place.

## Resources for all

ROUGOL (the RISC OS User Group Of London) is about to launch a RISC OS Education Resources site. The aim is to collect real RISC OS resources used by teachers.

Managed by Andrew Harmsworth he commented, "Obviously this is a valuable resource in itself, but has the added bonus of keeping more RISC OS systems in use and not gathering dust." Quite a number of files have been submitted already and

Andrew is in the process of putting these online, for more information on using or sharing resources visit:

<http://rougol.jellybaby.net/taught.html>

### Ooops

In the last issue we mentioned that Longman were about to release *Insight 3* for RISC OS, unfortunately they have only got plans to release Mac and PC versions.

## Anglia update

### Primary Maths Puzzles

[www.angliacampus.com/login/pri/mathspuzzles/index.htm](http://www.angliacampus.com/login/pri/mathspuzzles/index.htm)

Based on the Living Worksheets by John Ellis, the activities in this unit are divided into Level 3, Level 4 and Level 5 Puzzle Folders. Fun and maths for Key Stage 2.

### Summer Calendar

[www.angliacampus.com/login/pri/re/sum2000/index.htm](http://www.angliacampus.com/login/pri/re/sum2000/index.htm)

Useful for teachers and as a classroom resource, this charts religious festivals, historic days and special events. This edition takes you from the end of April

to the end of August. The Calendar includes links to relevant Web sites and with an R.E. emphasis this is again aimed Key Stage 2.

### The Bando in the Dark

[www.angliacampus.com/login/pri/english/bando/index.htm](http://www.angliacampus.com/login/pri/english/bando/index.htm)

A mysterious lunch-stealing bird-monster, the Bando, inhabits the coal mine of Philip Edwards' funny, affectionate and conservation-minded narrative poem. This unit also includes seven interactive exercises, and the chance to learn more about mythical monsters from around the world.

## In brief

### TEEMwork

TEEM (Teachers Evaluating Educational Multimedia) can be found as part of the National Grid for Learning. A Web site which contains evaluation and case studies written by teachers for teachers. Best of all the service is free. TEEM are also adding a National Software Library to their service which is housed at Homerton College, Cambridge. You can see what they have to offer at [222.teem.org.uk](http://222.teem.org.uk)

### Bookshelf

Books about the Internet date quickly by their very nature, but a new one is now available written by a teacher for other teachers, governors and parents. *Using the Internet to Improve Teaching and Learning* costs £7.99 and is published by Paragon Publishing. The author, Mike Battersby, has been a curriculum advisor in Information Technology for five years, occasional writer for *Acorn User* and has over 20 years of teaching experience in England and abroad.

The book itself covers curriculum integration in planning and strategies, using the Web to retrieve resources, for simulations, online databases, datalogging and discussion forms, while the sections on e-mail explore how to use this medium as a stimulus for writing; for developing international relations and foreign language teaching; as a leveller for those with disabilities and for carrying out research.

## Contacting AU

Pam Turnbull:  
[educ@acornuser.com](mailto:educ@acornuser.com)

# Primary numbers

**F**ollowing the review of Primary Literacy, here comes Primary Numeracy available at the moment for Years 1 and 3 with products for Years 2, 4, 5 and 6 to follow in June. Taking Lewis Carroll's *Alice in Wonderland* and *Alice Through the Looking Glass* as the theme, Alice herself has been brought up-to-date and the graphics and animations use the theme well and effectively.

The discs closely follow the National Numeracy Strategy with a grid detailing the numeracy strands being addressed and the relevant numeracy strategy objectives (including guideline reference numbers) for the programs with photocopiable worksheets included in the manual.

From the initial screen you can access the teacher configuration page by clicking on the caterpillar. Passcode-protected this allows you to see which activities have been completed, the number of questions and what level of help was accessed. You can also decide if you want children to attempt the lower, higher, both or neither activity for each section, and set the number of questions you want answered. A separate file can be set for each child and saved using the Save Status facility via the pop-up menu.

Help is available thanks to the Cheshire Cat and is available at two levels which automatically trigger if

*Count the costs of a new numeracy series with Pam Turnbull*

a child is having problems or can be activated by clicking on the feline icon at any time. This then launches into a mini-lesson highlighting the learning objective for the activity.

There are two other common features

always accessible, first is a playing card or chess piece which will take you to the glossary where you can find the meaning and correct use of words from *add* to *zero*. The second is a spider's web which takes you to Anglia's homebase where you can find extra materials and links to other Web sites.

## Numeracy One

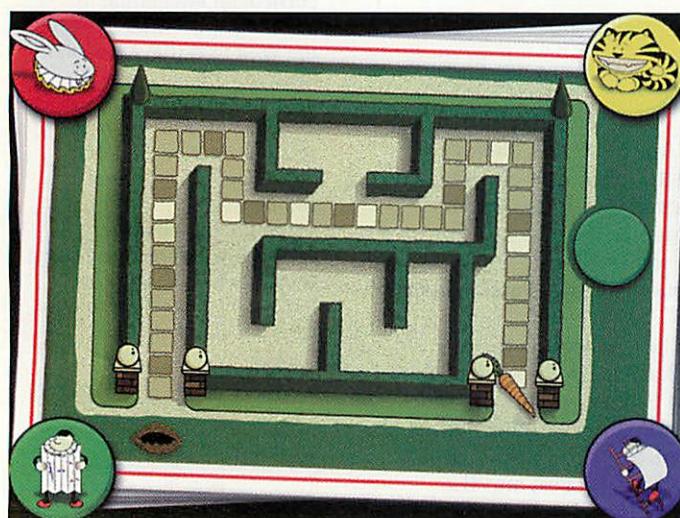
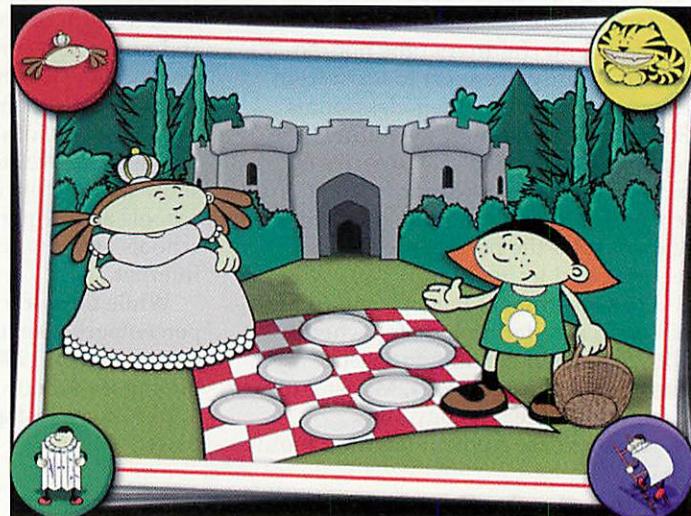
Having disappeared from the summer field Alice finds herself with a choice of three doors which will take her to three problem solving; two number system; and two shape and space activities. She is encouraged in her quest by the Duchess, Rabbit and Mad Hatter all of whom speak in rhyme!

Opting for problem solving gives you the

chance to change Alice's size, shrinking and growing courtesy of bottles on a shelf. Move your mouse and the bottle will reveal in figures and speech the amount it will grow our heroine by. If you get stuck at any time the Mad Hatter will repeat the instructions – the Cheshire Cat will explain the maths concepts behind the activity.

Alternatively you could sort out the sharing problems when you have to make sure everyone gets a fair bite at the picnic. Or how about filling the gaps in the sequences of patterns of numbers and shapes and get Alice across the stepping stones? The default mode gave too many questions for my testers who got bored with the task, so definitely try out the activities before you let your children loose. Move over items of the puzzle and you'll be told its name or value. Instructions are all spoken in this program with literacy skills not necessary to succeed with the maths.

Puzzles come in two sets and are progressively harder; if your number system needs work, then you could help position cards in order on the steps in *Which Comes Next?* or the excellent *Tea for Ten* where you must practice number



bonds to 10 by adding the correct number of tarts to Alice's basket. Unfortunately, at times the numbers are quite small which could be a problem for children with sight impairment.

The Rabbit was the most popular character with my children, mostly because the activities were obvious and seemed more game-like. *Posting Shapes* has you doing just that before moving on to rotate and match them to a second door in the maze. *Race the Rabbit* was great fun but doesn't hold a candle to *Crystal Rainforest*. Initially you must move forward, backward, left and right racing the Rabbit to the carrot or lettuce. Trial and error ruled here though you should be counting the stones, but these are small and, at times, obscured by Alice.

The second activity moves on to programming (turtle-graphic style) the number of spaces and left or right turns to get out of the maze. You must count the stones accurately and complete the instructions in full before you try out the program. It would be better if children could try instructions one at a time and if, when the program is running, the instructions were shown ticking off alongside. As it is you are re-presented with the instructions for another try.

## Numeracy Three

The rabbit hole is replaced by the

mirror over the real-flame gas fire. The four doors offer you: Data handling; Numbers and the number system; Measure, shape and space; and Solving problems. A total of eight activities again played at two levels.

Tweedle Dum asks children *What time is it?* and then you can practise real-time problems as *Alice goes shopping*. Alice is shopping with the Queen's money and, using nice clear coin images, you match coins (including £2 coins) to price tags before buying from a shopping list and working out how much you've got left from £10 after each purchase. When it comes to time analogue and digital clock faces are used reading the time in five minute segments.

*Which is Greater?* and *Building Walls* work on the number system with the former using the one and two-digit numbers and the greater than sign. Working with Humpty Dumpty you need to complete the wall in chunks of 5, 10 or 1. These get more complicated before you have to work out how many bricks make up a specific wall.

Behind these walls you can indulge in a bit of data handling filling in a pictograph at the *Knight's Party* before indulging in *Carroll Diagrams* to help the Knight sort out the guests with one or two characteristics. Success is met

by a guest appearance from Lewis Carroll, a talented mathematician who invented Carroll diagrams.

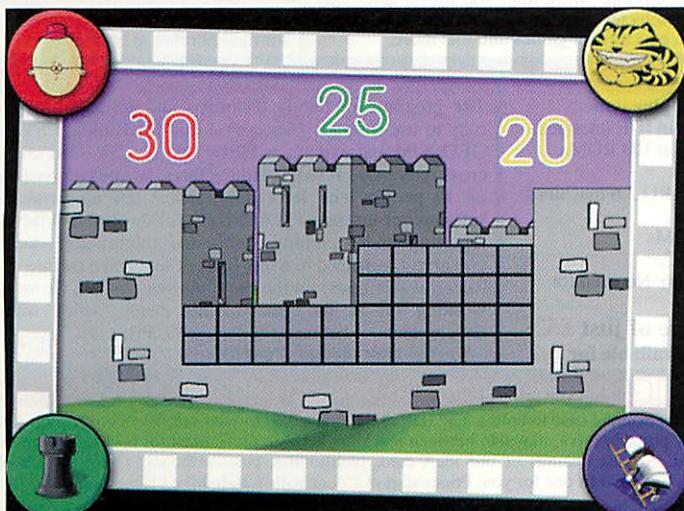
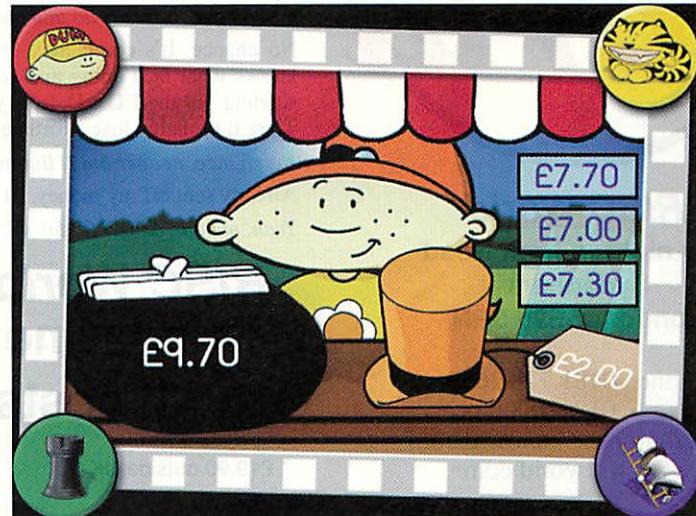
Finally the Queen needs your help with measuring in the *Queen's Kitchen* although I think you could probably do this more effectively off the computer, yet this does have the benefit that the rulers click into position ensuring that children start at 0 and they get instant feedback on their answers, the same is true of weighing the food.

Out of the kitchen, the Queen needs help with reflections in *Mirror, Mirror*. This starts off with quite simple shapes but becomes more challenging at the higher level. Succeed here and the Queen suggests holding writing to a mirror to see what happens.

Colourful, excellent NNS targeting, differentiated, records kept with an excellent glossary where red words hyperlink to other entries – these programs fit well into the Numeracy Hour as a group or individual activity. If you've got the right equipment these work as whole class revision or introduction exercises. A nice suite of programs you can dip into or use progressively.

### Product details

Product: Primary Numeracy One and Three  
 Ages: 5-6 and 7-8  
 Price: £55 each (10 user network licence)  
 Supplier: Anglia Multimedia, PO Box 18, Benfleet, Essex SS7 1AZ  
 Tel: (+44/0) 01268 755811  
 Fax: (+44/0) 01268 755811  
 Web: [www.anglia.co.uk](http://www.anglia.co.uk)  
 E-mail: [sales@anglia.co.uk](mailto:sales@anglia.co.uk)



# RISC World

## RISC World

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London SE26 5RN

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Fax: 0181 488 0487  
subscriptions@riscworld.com  
www.riscworld.com

Have you heard about the new magazine *RISC World*? It's on a CD.

*Yeah, but if it's on a CD it'll be full of old demos, out of date games and stuff like that.*

No, it's a proper magazine, it's on a CD 'cos that keeps the price down now printing and postage costs so much. And on a CD articles and reviews can be bigger and more detailed with lots of screenshots. With a printed mag – especially if it's in colour – the more pages, the more it costs to print.

*But it's bi-monthly, not monthly like the others. By the time we get it the news will be out of date.*

So when did you last get the hot news from a magazine? You get it from the net, then see the mags to find out more, So six big issues instead of twelve little ones makes sense.

*S'pose so, but if it's being published by APDL it's probably going to be full of articles about them and all the stuff they do and anything competing won't get mentioned.*

No chance. It's completely separate from APDL, with its own editor. David Matthewman. He knows what he's doing and won't let APDL interfere. APDL are just putting up the money and sending out the CDs. Daft, if you ask me. I don't see how they can do it for only £17.90 a year. They'll probably lose a fortune. Anyway, I'm not giving up my *Acorn User* subscription.

*No chance, neither am I. But are you going to get RISC World?*

Already sent off my money. At that price, I can afford both.

*Yeah, me too. At £17.90 for six CDs you'd be a fool not to, wouldn't you?*

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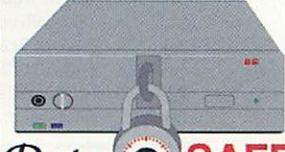
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# RISC OS

# Rambles

I cleared up a bit of a mystery this month, not the greatest one in the world but, nevertheless, a puzzle. Remember *Donkey Kong*, the game where a great ape threw barrels down at you? Well why was it called *Donkey Kong* when clearly there was no donkey in it at all? It turns out that it should have been called *Monkey Kong* but was miss translated by the Japanese.

I had a bit of misfortune and the monitor on my Mac died last month. I got a replacement from an advertisement in this very journal, a DeluxScan S770. By the way I thought the word "deluxe" had been declared extinct some time in the sixties. Anyway, as the Mac was in use I thought I would first try it on my Risc PC, two hours and many monitor swaps later I got it to work.

It started so well, I looked in the monitor's manual and fed the information into *MakeModes* and got a monitor definition file. Saved it in the boot structure at the appropriate place and then selected it, turned off and swapped monitors. The result, nothing was displayed at all. It turns out that pin 11 on the video connector was not connected to anything and the computer was set to use the logic level on this pin to decide whether to produce separate or composite syncs.

With it unconnected it was producing separate syncs and the monitor, being so clever, recognised it was missing a sync pulse and decided to blank out the display. The solution was simply to make the computer always produce composite, or mixed, sync pulses by typing "Configure Sync 1. Mind you if the monitor hadn't have been so "clever"

I would have seen the display and known straight away a sync pulse was missing. That's the problem with intelligent devices, they're so stupid.

And another thing, this here Internet, when are they going to find a short way of saying W W W? One suggestion at work was "triple U", now that's not strictly accurate because three double Us are six. But then again "sexU" might have totally the wrong connotation.

Ian McGee came up with a poser, he wrote:

**Q** "I have always wanted to build a laser larp but have been able to find schematics and instructions on how to build one. Do you have these available? Would you be able to point me in the right direction? I have a basic electronic knowledge and have just started with PIC16C84 chips using assembler."

**A** Now hands up who doesn't know what a "laser larp" is? Okay I'll put my hand down too. Anyway a bit of fishing about on the Internet search engines and I came up with the information.

Apparently LARP stands for Live Action Role Play and is an outdoor variant of the commercial Laser Tag games. There is information on the Internet that tells you all about this and includes some circuit diagrams for home-made equipment try looking at:

[www2.xtdi.com/~jbacon//lasertag/sensor.htm](http://www2.xtdi.com/~jbacon//lasertag/sensor.htm) and also:

[www.mdn.com/~odin/lasertag/tech.html](http://www.mdn.com/~odin/lasertag/tech.html)  
Basically the guns produce bursts of IR modulated at 57.6 KHz in a pattern of 16 cycles on and 16 cycles off. This in effect modulates the beam at an audio frequency of 1.8KHz. This signal in itself is easy enough to produce, although if you want to add things like shot length, delay before reloading and shot count it gets more complex and you are better off using a PIC microcontroller.

The sensor or target or "bit that straps onto your chest", on the other hand, is more complicated. This is because IR sensors with built-in amplifiers usually work between 30-40KHz and building one out of discrete components is difficult as the resultant circuit usually has poor sensitivity. I know, I tried to get my students to build one each year as part of a lab project, and the record range was about 2 meters.

There is a sensor from Seamans that is reputed to work but I don't know where you can get them from. When the target detects a beam, light need to flash the unit make a noise, and a hit count incremented. Therefore again it is best to use a PIC for this as well. You might even want some interaction between the target and the gun, say disabling the gun for 30 seconds once you are hit.

The 57.6 KHz standard is used so as to be compatible with some commercial guns built in the 80's, if you are using all home-built equipment you might be better off



redefining the standard to use the 37.9 KHz modulation used in most IR remote controls. Then you can get an integrated sensor and amplifier and have a much greater range.

Printing problems are a perennial favourite for questions, but not usually for answers. John Benton wrote to tell me of this:

**Q** "When printing with my Canon BJC620 I find that it keeps stopping halfway down the page. This has only recently started happening, it used to be fine. I haven't installed anything else so what could it be?"

Well I was about to reply when he found the answer himself:

**I** "On further investigation I found out that the parallel Zip drive that I had fitted and then removed still had some software left behind. It was periodically trying to see if a disc

had been inserted and couldn't get a reply and so was hanging up. It just goes to show when you think something has been removed it hasn't always."

Also I had similar question from Simon Anthony:

**Q** "I have RISC OS 4 installed on my Risc PC SA machine and I have a printing problem. When I set the printer driver to print in the background and try to print, the iconbar flashes as if it is being continually updated but nothing is going on. Not only that, but the printing rate is abysmally slow, bad old days speed. Put it to print in the foreground again and all is well. I have tried several drivers and several different apps to print from, but all do the same, so I think it's RISC OS 4."

I'm not too sure about this

but one thing to remember is that when printing in the background the computer uses a disc file, so make sure that there is plenty of room left on your hard drive. It is normally kept in: !Boot.Resources.!Scrap.ScrapDirs.ScrapDir.Printers

You could try deleting this file and forcing the computer to make another one. As I haven't got RISC OS 4 yet I don't know if there is anything that you can do to give you a bigger file. Another thing that could be slowing it down is if you have some other background application that is hogging the time. Try closing things down to see if it speeds up the printing, if so then add them one at a time until you find the culprit. I remember some time ago a little utility that showed CPU usage for each open application, that could track it down but unfortunately I can't remember its name.

John Greenwood wants to do things a better way:

**Q** "At work I am building a bit of equipment to do some measurements. This required making a number of counting and timing operations and doing some sums. I have purchased a PCI-based interface card and intend to fit it into a PC. The computational requirements are trivial and I hoped to use a discarded 386. However when I got the card I found that it would only run under the latest version of Windows and that I will have to get a more recent PC.

"Apart from being annoying, I have to justify procuring a computer several times as expensive as the card, just to do some trivial sums, I thought this is fundamentally silly, if only there was a RISC OS-based solution. As I am sure you are aware all sorts of scientific and engineering measurements can be made using these interface cards, which are supplied by a number of manufacturers. I have no idea what the total market is, but it must be large in order to support the development of hundreds of different sorts cards.

"Basically one plugs one of these cards in a PCI slot, loads some interface software and then you have a powerful measurement system. (Or at least I hope this is how it's going to be!). However in many cases you end up with a hugely cumbersome system most of which is redundant for making the routine measurement.

"Could there be a more elegant RISC OS-based system that would be a better solution for a significant proportion of these applications? The minimal motherboard would carry the ARM CPU with the operating system in ROM, some non-volatile memory, interfaces to a VDU and keyboard and extension slots; (probably not that different to a network computer). The user can choose to add a hard- or floppy-disc drive or a network interface or no storage at all, as required by the application.

"The advantages would be: fast start-up, robust operating system, fan only needed if the interface boards

require it, compact, in some applications the easy use of machine code for fast response to interrupts, low power requirements for portable applications and so on.

"The big problem that I see is of course the availability of software. My card came with drivers that allows it to be driven by Lab-View, which I am sure I will find is wonderful once I have got the computer to run it on. The RISC OS alternative would need some sort of equivalent. Is this wishful thinking or is someone already manufacturing it?"

**A** Thanks for the thought although I fear that there is little to be done. The problem is one of scale. Most PC data logging solutions are sold on the premise that you already have a PC and therefore that bit costs you nothing. In a way this could be true as often older PCs can be used to perform these simple tasks, where as they are not up to running the latest software packages, apparently a point lost on the suppliers of your card.

Another problem is that once you start adding options, memory, storage, a high-level language like LabView you end up with a computer anyway. By the way LabView is a very nice language, it's icon-based, that is you program by dragging functional blocks around and wiring them up. I first used it on the Macintosh over ten years ago. Then the Mac was the only platform it would run on, later they added colour and made it PC compatible.

There is a Students edition available for about £30 which has some features disabled and limits the size of the program but gives a good insight. Sadly there is no RISC OS equivalent of this language. For low cost data loggers you might be best using a PIC micro and the one-wire interface, described in my recent Run the Risc articles.

Alternately you could use I2C devices but you would need an I2C driver for the PIC. Anyway I think the combination of BBC BASIC and a RISC OS computer represents the best way of customised data logging, providing you can write your own software.



## Internet kit from RiscStation



## RiscStation 'InSite' Internet Pack



### WebsterXL

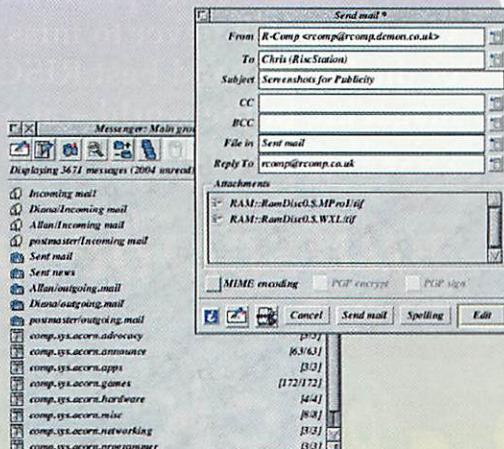
WebsterXL Internet Browser provides full support for frames, tables and forms as well as support for RISC OS plugins allowing for Java and Shockwave compatibility. This great browser has been designed for Netscape and Internet Explorer compliance and has integrated sound and music support for a rich multimedia environment. WebsterXL now has a JavaScript interpreter too. An excellent piece of software endorsed by RiscStation Ltd.

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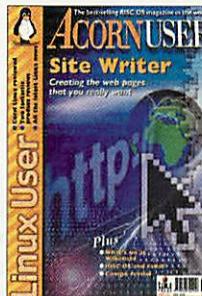
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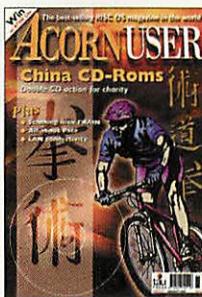
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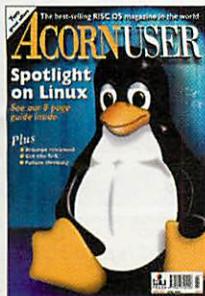
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## Contacting us

Editor:	<a href="mailto:editor@acornuser.com">editor@acornuser.com</a>
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# Over the

I currently use a PIII 450MHz with 128MB RAM and Windows 98. I don't particularly like Windows. It's bloated, slow, has a lot of annoying features that are supposed to make work 'fun' and messes up too regularly for my liking.

When I install drivers or software I expect it to go wrong. My scanner works intermittently due to problems with the drivers and the hard disk needs defragging regularly. And it's not as if my system resources are stretched, I have 3Gb disc space free.

The machine wouldn't shut itself down properly when I bought it, and had other stupid problems, so I reinstalled Windows. A couple of months later I had to format the hard drive and reinstall everything because the machine was so badly screwed up. According to Windows, it cannot now defrag the

hard drive because the amount of free disk space is being reported incorrectly. Scandisk just hangs when it tries to rectify the problem. So I'm faced with having to reinstall that excuse for an OS for the third time and I've only had the machine seven months!

The final straw came when Word couldn't print my document due to lack of memory - 128Mb and it couldn't print seven pages of text with a few embedded pictures!

So what options have I got? Well, I tried BeOS, it's free, and it seemed worth a try. Nice hassle-free operating system, shame that there's next to no software for it. And then I remembered those wonderful Acorn machines we had at school. They never seemed to crash. I thought to myself "I wonder if they still make them?" The Acorn Web site was dead but I eventually managed to piece

together the situation today.

To my mind, RISC OS is head and shoulders above any other I've used (and remember I've only had experience with older versions of it). It's intuitive and to the point, no stupid animations to get in the way of what I want to do. And has that wonderful feature of being able to type into a window in the background. Then there's the ROM - impregnable to viruses, impossible for the OS to be screwed up. RISC OS should be a lot bigger than it is.

Then there are the RISC OS machines themselves. Similar in cost to a PC, but while a PC is obsolete after 6 to 12 months, a RISC OS machine stays up to date for years. That's an easy choice to make.

If only people knew they had a choice. I'm very tempted to sell my PC and buy a RISC OS machine to

## Internet phones defended

I'm sorry to have to disagree with your April leader on Internet phones, but it is born of the same kind of misapprehension that once led Bill Gates to write off the Internet. The computer users consulted seemed to assume that Internet access inescapably implies sitting at big screens, surfing pages heavy with graphics and Javascript.

No one would attempt to do that with a WAP (Wireless Application Protocol) mobile handset because that's not what they're for. Think of them instead as 'Internet lite'. I'm writing these words aboard a train which I caught after looking up my journey details with a pocket WAP phone, over an IP connection to a railway timetable server.

There was no need to wait for

some enquiries operator to answer and I did not need to carry a computer with me - I could get exactly the information I wanted where I happened to be, on the screen of my phone.

WAP phones are for making simple enquiries and receiving simple responses - primarily text information, although, of course, the WAP standard can do more than that. These devices are just one kind of tool for accessing the Web.

Heavyweight browsers are another. In the same way, you might own a big hi-fi system at home as well as a portable or car radio - they're for accessing the same resources in differing ways.

Faster wireless data rates will bring us multimedia Net access on

the move within the next few years, if we want it, and packet radio access should make it cheaper; but in the meantime, today's "pitiful" 9.6 kbit/s bandwidth is perfectly adequate for picking up a news or travel bulletin in text form.

WAP phones offer millions of us a convenient and economical way of finding out the football scores, making payments from our bank accounts, booking theatre seats and much else. Some analysts predict that, in as little as three years, more people will be accessing the Net from wireless phones than from PCs.

Even if this proves to be only half true, it will certainly exert a profound effect on the Net and how we see it. For one thing, WAP access is not dominated by Microsoft.

# fence

replace it. And I'd have done it already if I hadn't been put off by a number of issues. The reason I'm writing is because I feel that unless these issues are addressed, and soon, the future of the platform is going to be very bleak as others in my position are similarly put off.

The small user base tends to make one think that perhaps there aren't many companies out there developing software for the platform. I mean proper, professional development studios, not an enthusiast working in his back bedroom. True, they often make good software, but when it comes to support...

If I thought the user base was going to increase substantially in the near to medium future, this might not worry me so much. But the fact is it won't. Not unless there is some publicity. Plenty of

advertisements in *Acorn User* and such like, but outside the RISC OS community, there's nothing.

Companies such as Castle and Riscstation may be developing fabulous new computers, but the fact remains that nobody can buy them if they don't know they even exist.

If people aren't going to promote the platform properly to a wider audience rather than just to the RISC OS community, then the platform is going to be consigned to the 'heritage' section of computer history very shortly. It doesn't deserve this, and I'm sure nobody wants it. It needs a new generation of users, all they need is information and some gentle persuasion.

I told a friend about RISC OS machines. When I explained some of the features, she was suitably impressed. She needs a computer, but hates the Windows environment, until I told her about RISC OS machines, she was unaware that there was any alternative to 'wintel'.

I've never seen a RISC OS machine in a High Street store. Has nobody thought of making a deal with Dixons or Curry's or PC World or any of the other well-known names? And if they have and they've said no, they need to keep banging away until they get something.

When people are buying computers, they like to see what they are getting, they want to see it working, mess about with it in the shop before deciding it does or does not suit their needs. If they can't do that, they won't buy, it's too much of a risk (no pun intended!).

I know there are a few distributors, but as far as I know they are all very small scale affairs.

As for your confession that you haven't yet got a mobile phone, that places you in a fast-shrinking group of people for whom it's more convenient to go to the phone than have the phone go with you.

I recommend you to go out at once, treat yourself to one of the new WAP handsets (you'll find them much less costly than any kind of other Internet terminal, and you can console yourself with the thought that a lot of the best mobiles are ARM-powered), and prepare to eat your words.

Richard Lambley

(richard@wireless1.com)

Land Mobile magazine

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Land Mobile magazine has been produced on RISC OS machines since 1993

I want to be able to go to my local retail park to buy a computer, as well as upgrades and software for it, not hunt round the back streets of Accrington Stanley for a tiny shop.

I know part of the present situation is due to Acorn losing interest in the desktop computer market. But that's history, it's no good moping about it and blaming them for the present situation. RISCOS Ltd, Castle, Millipede, Riscstation and the others have not only continued to sell RISC OS products, but are developing them. In vain unless they couple that with some decent marketing to expand the customer base I'm afraid.

I'd buy a RISC OS machine tomorrow if I knew it was going to be viable in the future. I see in the newsgroups people bickering about how best to support the market. It doesn't need supporting – it needs expanding, promoting and exposed to the general public. If this doesn't happen soon then I, and others in my position, are going to have to stick with our sub-standard systems.

Somebody with the enthusiasm, will and industry experience to bring RISC OS machines and their software back into the public eye and at least have a go and making a success of it needs to do so. Now.

The RISC OS community needs to seize the golden opportunity it now has, stick its neck out, get noticed and reap the rewards. Perhaps breaking the link with the past and concentrating on the future will help to entice new users. I know it's the only way that I'm going to be convinced to part with my student loan. I want to buy into a visibly vibrant market, not a stagnant one.

Robert Richards

by e-mail

## My Mac-using friends have gone through up to three machines

74

**S**imon Fraser has a very cool lifestyle: He's an artist who lives in Vienna, does artwork for cult British comic *2000AD* and spends time eating out and driving around Eastern Europe. He claims that working from home means that he can be very flexible about where he lives. Given that freedom, I think I might live in Vienna too, but Simon actually lives there because his wife works for the UN.

'I've got a cable modem, so I can bash artwork to London very quickly and cheaply, faster than when I was living in the UK. We were in Frascati two years ago, there were no Acorn dealers nearby and it took time to get my machine online, though the Sincronia Soluzioni guys in Turin were very helpful and I helped them correct the English version of the *TopModel 2* manual.'

Simon started working for publishing house Fleetway as an artist in 1993 on *Roy of the Rovers*. He then worked on the *The Judge Dredd Megazine* where he met his collaborator Robbie Morrison.

'We moved over to *2000AD* in 1996 where we created "The Adventures of Nikolai Dante". The majority of my computer-generated artwork has been related to Nikolai Dante, particularly the *2000AD* covers that I have done.'

'My Risc PC didn't come into the picture until 1996 when I started colouring up illustrations using scans from my fax machine. I got a business development loan which went to beefing-up the Risc PC and adding peripherals in anticipation of using it as a serious artwork tool.'

'It's the great strength of the Risc PC that it can be expanded so much; from a 2Mb ARM 610 to a 190Mb, 2Mb VRAM, StrongARM with SCSI 2 CD writer and 2Gb of harddisc space. My Mac-using friends have gone through three machine replacements in the time I've been using this Risc PC.'

Simon's first encounter computerwise was with a BBC Micro back in 1984, which his dad bought and which he was still using up until 1995 when he bought his Risc PC. Simon's father has been running his Highland medical practice on Acorns for years, first on an A420 and then a network of StrongARM Risc PCs.

Artists do not appear 'as if by magic' overnight. The reason that they can seem to is that people only hear of them when they are already famous and successful.

Simon served part of his time at the Edinburgh College of Art doing a degree in Visual Communications: 'I spent much of

that bombing around southern Scotland making films. The film and TV department was very open to any form of visual storytelling, which the Illustration department was decidedly not. We had a demo of a *Quantel Paintbox* at college; it was obvious that this was going to take over everything, so I got onto that bandwagon early.'

Simon is desperate for more power for his machine, but he is holding fire on getting any new hardware. Mind you, he'd love to get his hands on a working Millipede motherboard.

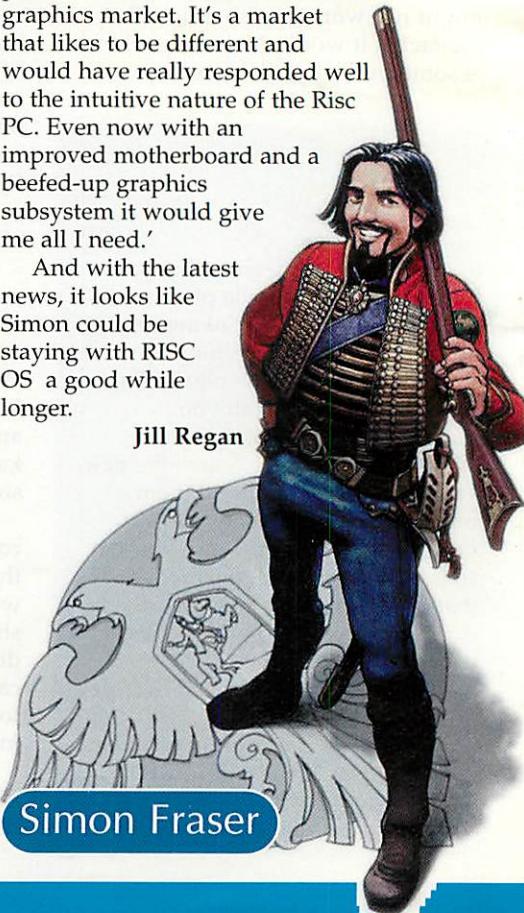
'I really don't want to give up on *Photodesk 3*, as I know it back to front and it's an excellent tool for creating artwork, but times are moving on and I'll need to upgrade my work machine very soon. I've got a 500Mhz PC here, which has taken over CD burning and scanning, not to mention all Internet and games duties.'

The Risc PC is dedicated to *Photodesk* and *ArtWorks*, but this won't last long. I'm already having to get pretty handy with *Photoshop*. I still find the Acorn very pleasant to use, though throwing 40Mb TIFFs around is a chore for it.

'I was always frustrated that Acorn never pushed their hardware into the graphics market. It's a market that likes to be different and would have really responded well to the intuitive nature of the Risc PC. Even now with an improved motherboard and a beefed-up graphics subsystem it would give me all I need.'

And with the latest news, it looks like Simon could be staying with RISC OS a good while longer.

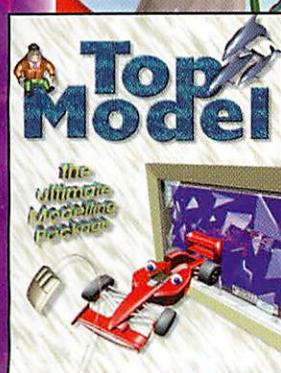
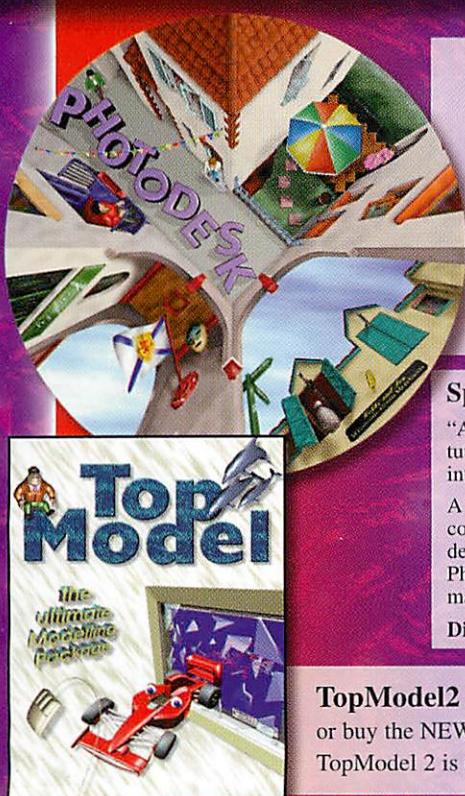
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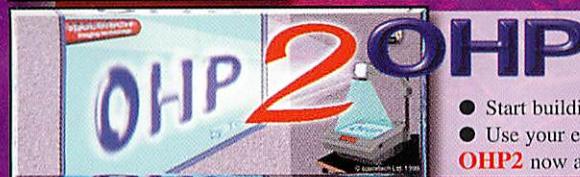
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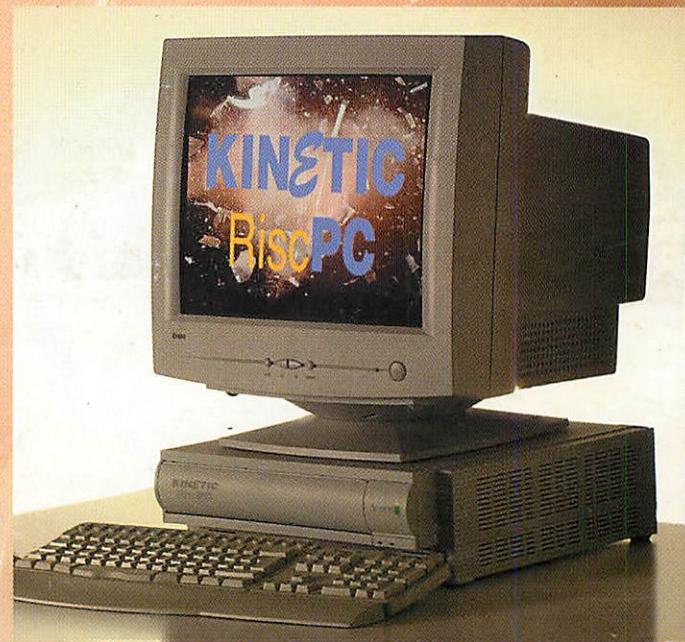
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